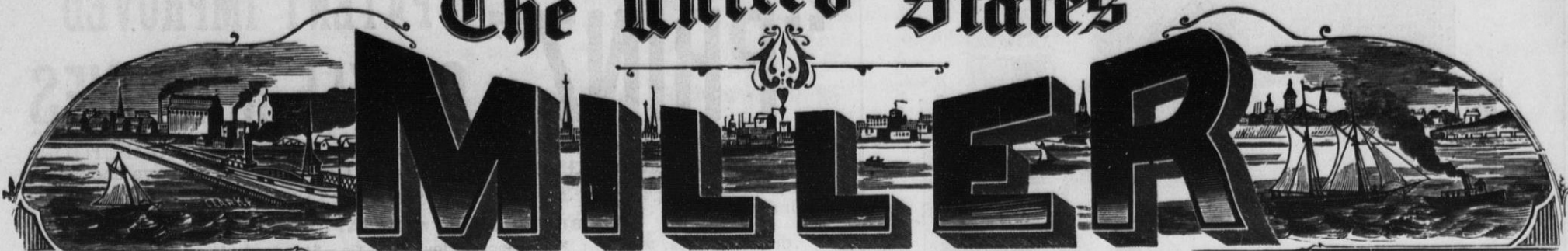


The United States



AND THE MILLING ENGINEER.

Sixteenth Year.—No. 12.

MILWAUKEE, DECEMBER, 1891.

Subscription Price, \$1.00 Per Year.

PERTAINING TO THE CROPS.

THE world's wheat production in 1891 as compiled by Bradstreets has only been exceeded once since 1887. A table of compilations which will interest all having dealings in wheat.

"It will prove a source of some surprise to many to learn that latest available official, semi-official and unofficial estimates of the production of wheat in countries which either import or export the same in appreciable quantities furnish an aggregate fully 17,000,000 bushels in excess of the like aggregate in 1890, and more than 61,000,000 bushels heavier than in the crop year ending June 20, 1889. This at least is the conclusion one reaches after studying the totals which have been collected and published by no less an authority than Mr. J. E. Beerbohm, of London. The publication of recent "provisional official" or semi-official estimates of the wheat crop in America, Russia, France, Hungary and Australia render this compilation possible. It also appears that, notwithstanding the unexpectedly heavy yields in this, a year of so great a scarcity in portions of Europe, the total production is not in excess of estimated requirements. The great deficiency in the European rye crop is characterized as "a separate and unusual factor which renders the present season one of an extraordinary character." The crop-total estimates which are in no sense based upon official data are those of Turkey, Syria and Persia. The totals of Argentine and Australasia it is believed will be more likely to fall below than to exceed the aggregates assigned them. The tabulation, in quarters (8 bushels each).

The alphabetical arrangement has advantages, of course, but we believe the meaning of the year's shortages of wheat may be the better appreciated by arranging the following totals geographically as follows:

	1891.	1890.	1889.
France.....	28,000,000	41,120,000	39,250,000
Germany.....	11,500,000	12,750,000	10,825,000
Spain and Portugal..	9,750,000	10,150,000	10,200,000
Italy.....	15,450,000	16,200,000	13,250,000
Belgium.....	1,250,000	2,400,000	2,250,000
Holland.....	1,500,000	700,000	650,000
Switzerland.....	500,000	500,000	400,000
Denmark.....	450,000	490,000	525,000
Norway.....	50,000	50,000	50,000
Sweden.....	400,000	450,000	463,000
Totals, quarters.....	67,800,000	84,810,000	77,663,000
Austria-Hungary.....	20,500,000	24,150,000	16,032,000
Greece.....	1,500,000	1,500,000	1,975,000
Turkey (Europe).....	4,000,000	4,000,000	4,000,000
Servia.....	1,250,000	1,250,000	750,000
Roumania.....	6,000,000	7,000,000	5,437,000
Bulgaria.....	4,850,000	3,720,000	4,300,000
Totals, quarters.....	38,100,000	42,400,000	31,894,000
Russia (including Poland).....	23,300,000	37,370,000	25,830,000
United Kingdom.....	8,750,000	9,450,000	9,485,000
Totals, Europe, qrt's.....	137,950,000	163,530,000	144,872,000
Algeria.....	2,500,000	2,500,000	1,970,000
Cape Colony.....	500,000	450,000	550,000
Egypt.....	1,350,000	1,250,000	875,000
Totals, Africa.....	4,350,000	4,200,000	3,395,000
India.....	30,750,000	27,500,000	29,643,000
Asia Minor.....	4,500,000	4,500,000	4,500,000
Persia.....	2,500,000	2,750,000	3,000,000
Syria.....	1,500,000	1,503,000	1,500,000
Totals, Asia.....	39,250,000	36,250,000	38,643,000
Argentina.....	2,750,000	2,250,000	3,000,000
Chili.....	2,000,000	2,250,000	1,875,050
Totals, S. America.....	4,750,000	4,500,000	4,875,050
United States.....	73,500,000	50,000,000	61,320,000
Canada.....	6,000,000	4,575,000	3,250,000
Totals, N. America.....	79,500,000	54,575,000	64,570,000
Australasia.....	3,500,000	4,105,000	5,375,000
Grand Totals, qrt's.....	269,300,000	267,160,000	261,630,000

The features of this table are the unprecedentedly short crops in Europe and the transfer of power to supply wheat from the old world to the new. The change in this respect is to be better seen

in the following record of the crops in European and non-European countries since 1887, to which is added the (Beerbohm's) estimated normal consumption of the world (000 omitted):

	1891.	1890.	1889.	1888.	1887.
Production wheat.....	137,950	163,530	144,872	162,456	172,115
European.....	137,950	163,530	144,872	162,456	172,115
Non-European.....	131,350	103,630	116,758	108,100	110,003
Totals.....	269,300	267,160	261,630	270,556	282,118
Estimated consumption.....	272,250	270,500	269,750	268,000	266,250
Balance, qrt's.....	-2,950	-3,340	-8,120	+2,556	+15,868

It is admitted that it is somewhat arbitrary to assume that the consumption in the world increases annually by 1,750,000 quarters, but 'this is the figure implied by the natural increase of the population, other conditions being equal.'

The years of 'plenty' ended, according to this exhibit, in 1888. Several years previous to 1888, and notably 1887, were 'fat' years, and left large reserves upon which a considerable drain has evidently been made. The main point, however, is that, according to computations and past experience, the present year's wheat crop is barely equal to the estimated current consumption; while the rye crop this year, according to the last Russian official estimate (11,000,000 quarters larger than the one issued last August), is 28,000,000 quarters less than last year, and 8,000,000 quarters less than in 1889. Under these circumstances the present apparent abundance of wheat can only be considered temporary, having been the result of active European buying during the past three or four months. The delay in the prohibition of exports of wheat from Russia induced extraordinarily large shipments from that country, so that the quantity of Russian wheat now cut off from importing countries would not exceed 2,000,000 quarters, 16,000,000 bushels. The supply and demand, taking the season through, is, however, 'such that the sentimental effect of the prohibition of Russian exports, especially on the American markets,' it is declared, should 'be very great—America would indeed then be the maker of wheat prices.' Meantime, adds Beerbohm, 'foreign wheat is in too liberal supply for any advance to make much progress,' even in America, where prices are now being made."

The failure of the foreign rye crop alone makes it possible for America to dictate prices to foreign buyers. In view of the fact that Russia's crop of wheat this year is but 4,000,000 quarters less than her largest yield—any one year—and being the largest wheat exporter of any country excepting the United States, it would seem that the care of her starving poor was wholly and completely under her own control—notwithstanding a short rye crop.

PROGRESS OF THE METRIC SYSTEM.

THE project of a uniform system of weights and measures for all civilized nations is one which, while not attracting a great degree of attention on the part of the people, will always continue to be pressed by thoughtful and progressive men until its final adoption, which is probably only a matter of time. Uniformity in the standards which register amounts and values in the exchanges of commerce is so desirable, and in a more

extended system of commerce will be so necessary, that it may be regarded as sure to be ultimately brought about. When we come to inquire what existing system presents the best chance of ultimate adaption, we are met by the fact that while some of the most important commercial states, as the United States and Great Britain, use one system in their ordinary transactions, they have made another, the metric system, optional, as have some other states, while the great majority of the civilized nations of the world have made the latter system obligatory. The states which have made the use of the metric system obligatory are Germany, Austria-Hungary, Belgium, the Argentine Republic, Spain, France, Italy, Peru, Portugal, Roumania, Servia, Sweden, Norway, Switzerland and Venezuela. The countries which have made the use of the metric system optional are the United States, Great Britain and Turkey, while the system has not yet been legalized in Russia and Denmark. The weight of authority, so to speak, may therefore be said to be in favor of the adoption of the metric system, and it is this system which is most energetically advocated, and with reason, when the project of a uniform system of weights and measures is discussed.

The use of the metric system in the United States has been optional for a long time, but its adoption has been confined mainly to governmental departments and scientific bodies. It is already used in the marine hospital service, in the foreign business of the post office, in the Coast and Geodetic Survey, and, to some extent, in the Geological Survey, the Mississippi river survey, the Mint, the international weather charts and bulletins of the United States Signal Service and the reports of the United States Census of 1880. The International American Conference, in a unanimously adopted report on weights and measures, recommended the adoption of the metric system by the United States, and Secretary Blaine, in a letter accompanying this report, which was transmitted to Congress by the President, recommended the adoption of the system in the customs service. The Secretary submitted a draft of a bill for that purpose, which provided that on and after a certain date the metric system of weights and measures authorized by the act of Congress approved July 28, 1866, should be used exclusively in the customs service of the United States. The subject has recently been brought again to the public attention through the circulation of a petition prepared by the American Metrological Society, asking Congress to enact such a measure, to go into effect on July 1, 1893. This petition the society desires to have numerously signed and transmitted by the signers to the representatives of their districts in Congress. This petition may be heard from in the next Congress.

There are always difficulties in the way of the adoption of a new system of any kind. The *vis inertiae* is a powerful force in human nature; it is always so much easier to go on in the accustomed paths than to make improvements. At the same time the advantages of the metric system are so great that they bid fair to overcome even the force of long habit. The system

in the first place is decimal, and has the advantage for purposes of computation that decimal systems have over others based on a different principle. Again, the metric units of length, bulk, weight, etc., are simply related to each other, a circumstance which gives the system a great advantage over the irregularly related or unrelated units of other systems. Finally, the system has become an international one, and intercourse between nations has increased to such an extent that it is now as important to have the same weights and measures used in different countries as it was a century ago to have the same weights and measures used in different parts of the same country.

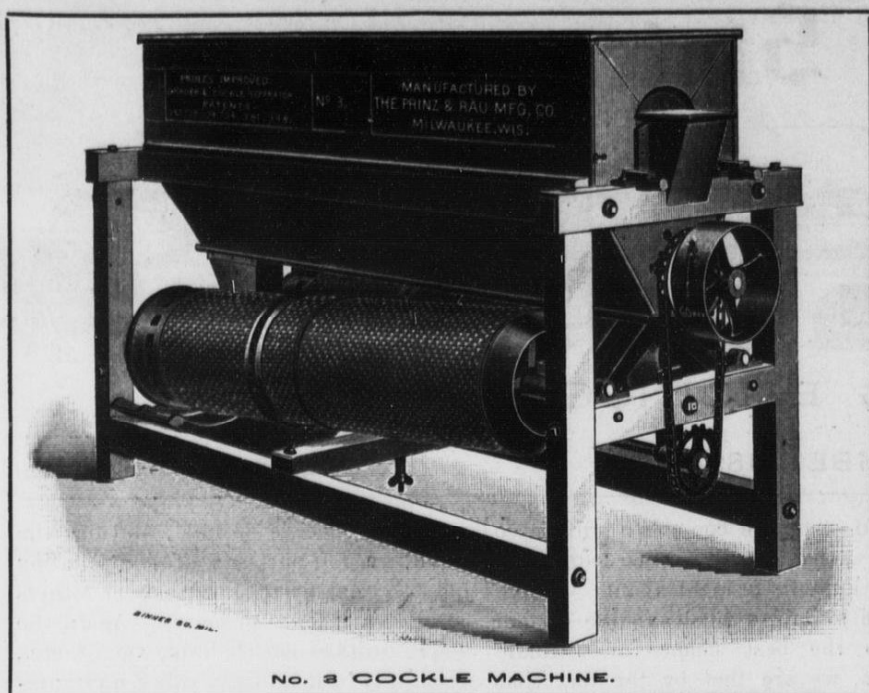
Naturally enough, the first step in the introduction of the metric system was the making its adoption optional. The next step would be the making the use of the system in the government service exclusive, as was proposed in the enactment recommended by Secretary Blaine referred to above, and as is contemplated in the practically identical measure pressed for adoption by the Metrological Society. The adoption of the metric system by the government offices would not be very difficult and would not require a great amount of time; indeed the outside limit fixed by the department officials who have been consulted is twelve years, which is the time estimated for the complete introduction of the system into the customs and internal revenue service. In most of the departments it would require only about two years or less. The adoption of the system by the government in the customs service would be of the greatest importance to the progress of the metric system in the United States. It is not to be doubted that its adoption by the government would be followed shortly by its adoption by chambers of commerce, boards of trade, manufacturing associations and other voluntary societies and individuals, from which point its ultimate and complete adoption would be only a matter of time.

ELECTRICAL.

"THE next great field lying ready to be cultivated by electrical engineers," said a thoughtful man, "is that of equipping large mills and manufactories with electric power. It's bound to come. Just consider the possibilities in such a line of work."—*The Electrical Review*.

It is stated that Mr. Edison owns between 400 and 500 patents. When experimenting, he wears a long, loose frock of checked gingham, reaching from his chin to his feet.

THE janitor of a building in this city touched a live wire, which was not properly insulated, it burned a ragged hole through his waistcoat, and rubbed against his watch. He received a slight shock, and, upon recovering, looked for his watch. The works had been thrown out from the case, and irregular scalloped holes were burned in the front and back of the case. Around the edges the melted gold had formed small globules, and similar globules were found on the floor. The works of the watch were so completely magnetized that they are worthless.—*The Engineer, New York City*.



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THE DUNLAP BOLT

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IT IS NOT A CENTRIFUGAL REEL.

IT IS A BOLTER AND DRESSER.

BROOKLYN, N. Y., Aug. 11, '91.

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Dear Sirs: Please Ship as soon as possible, 4 Dunlap Bolts the same as the last one. This is about the "Boss" Bolt after all and we will want more of them after awhile. Yours truly,

KING'S CO. MILLING CO.,
John Harvey, Head Miller.

BUNKER HILL, ILL., May 28, '91.

THE BRADFORD MILL CO., Cincinnati, O.

Gentlemen: Your Mr. Deobold has remodeled our mill using two of your No. 3 Dunlap Bolts to reduce our Patent and Bakers. Have been running a week and find we can make 50 per cent Patent, 42 per cent Extra Fancy and 8 per cent Low Grade. Our mill was rebuilt two years ago and it has never given satisfactory results until now. Yours very truly,

WISE, MERCER & CO.

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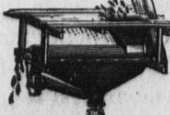
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[Entered at the Post Office at Milwaukee, Wis., as

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MILWAUKEE, DECEMBER, 1891.

We respectfully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in the UNITED STATES MILLER. You will thereby oblige not only this paper, but the advertisers.

MILWAUKEE AMUSEMENTS.

DAVIDSON OPERA HOUSE—Every evening, Satur-

day and Sunday Matinees.

BIJOU THEATER—Every evening, Wednesday, Satur-

day and Sunday Matinees.

ACADEMY OF MUSIC—Every evening and usual

matinees.

STANDARD THEATER—Every evening and usual

matinees.

PEOPLES THEATER—Every evening and usual

matinees.

GERMAN STADT THEATER—Regular performances

Wednesday, Friday and Sunday evenings.

LAYTON ART GALLERY—Free Tuesdays, Thursdays

and Saturdays. Admission 25 cents on Wednes-

days and Fridays.

PUBLIC MUSEUM—Open daily. Exposition building.

Visitors to Milwaukee in either summer or winter

cannot fail to find amusements suited to their taste.

aggregating \$200,000,000 — a reserve amounting to \$1,000,000 — with the Lancashire, of Manchester, Eng. The transaction was celebrated by a dinner given to about seventy insurance men in New York last evening by Mr. Armstrong. There is a significance attaching to this deal that millers will do well to heed.

MILLERS' TRACING BUREAU.

THE bureau is still prospering, new members are joining from time to time. There is a gradual increase in volume of business each month over each preceding month amounting to about 20 per cent. The total number of sacks traced during the current month will reach at least two hundred thousand. An average of from seventeen to eighteen days is being maintained from time of shipment to date of sailing. The secretary is receiving highly commendatory letters from the patrons of the bureau, and the European flour buyers are beginning to appreciate the benefits of having their flour traced. Several communications to this effect have been received from British buyers; one prominent firm returned their sailing notice to shipper endorsed across the face: "This commends itself to us. It is making good time also."

There are now over twenty of the heaviest western flour exporters reporting all their shipments to the bureau for tracing service, besides a number of smaller and occasional shippers. There seems to be a strong demand from members of the association for tracing services upon domestic shipments; and the executive committee of the National Association hope to make arrangements for such services early in the new year.

INSURANCE.

THE proposed Northwestern Fire Insurance Company, of Rock Island, Ill., contemplated by W. B. Ferguson, secretary late Mississippi Valley, has failed to materialize.

THE burning of the North Star Boot and Shoe Company's plant at Minneapolis, equipped with the Walworth sprinkler system, is another experience for sprinkler companies to heed. Will they profit by it? No sprinkler company ought to allow a plant to be equipped with their devices, except upon their own plans and under the direct supervision of an expert in their employ. If they do, they should not complain if their reputation is badly scorched, when the equipment is burned in the building it was expected to protect. And any fire insurance company writing a double line on a sprinkled risk at half rate or less, by reason of the statement that "the risk is sprinkled" without a thorough examination by a competent inspector, should not complain when the loss comes through some defect in the equipment.

A plant properly equipped with automatic sprinklers must show good results.

A test of the Grinnell equipment at the works of the Cataract Manufacturing Company, Niagara Falls, N. Y., a few days since, with an air pressure on pipe of twenty pounds and a water main pressure of fifty pounds per square inch, water was flowing through a head in one corner of the building in forty-five seconds after it had been automatically let into the system. In the second mill with air pressure at twenty-five pounds the fire was out in one minute and fifty seconds from the time it started.

MILLERS' NATIONAL ASSOCIATION.

THE affairs of the association for the past year seem to have been kept well in hand. Everything that has arisen of a nature requiring aid of an organization has been promptly and effectively attended to; and we think members will be fully satisfied when they receive the report of the executive committee, which will show that the affairs of the association have not been neglected.

Few members are aware of the fact that

the association has yet several patent claims in which the members are somewhat interested, viz: the purifier suit of Russell vs. Kendall & Co.; the Mechwart claims on corrugated rolls; the Detwiller claims which have been contested by the Pennsylvania Millers' Association for some years at an expense of about ten dollars per unit capacity; and the Cyclone Dust Collector patents. It is not expected these suits will cost the membership a large outlay, yet neglect on the part of the executive committee would result in some cases to large royalties being demanded and considerable annoyance.

The committee have taken up a number claims on the part of members, and suits have been entered in the case of the Gem Milling Co. against the Anchor line for unreasonable delay and damages sustained on an export shipment to Glasgow. Steps have also been taken in the case of Stern & Son against W. A. Green, of Providence, R. I., for cancellation of an order for flour without valid reasons. This will result in an early settlement. That more such cases have not been taken in hand by the committee is simply by reason of the fact that members have not presented their complaints.

INSURANCE COMPANIES RETIRED.—THE OUTLOOK NOT FLATTERING.

FIRE insurance companies, both stock and mutual, are being retired at a rapid rate. The year 1891 will long be remembered as a Black Friday year in insurance circles. A number of prominent stock companies have been re-insured during the month, and quite a number are reported as contemplating similar action. Among the mutuals added to the long list "gone before" may be named the Hudson River Fire and Marine, of Jersey City, N. J., managed by Geo. B. Delamator, formerly of the Reliance, of Dubuque; the Woodworkers' Mutual, of Winona, Minn., a sprinkler company, re-insured with the Mutual Fire, of New York; State Mutual, of Hyde Park, near Chicago retired. We think, at a rough estimate, over sixty stock and mutual fire insurance companies have been withdrawn from the field within a year. Flour mills cannot be at fault for such a disastrous showing. The fact that all Mill Mutuals, writing nothing but mill risks, have "held the fort" in every instance, shows conclusively that we must look to other classes of hazard for failure to make a profitable showing. We anticipate that the coming annual statements will make interesting reading for those interested in such literature. There certainly is little or no inducement for capital to invest in insurance stocks.

Twelve London Lloyds underwriters stop writing on account of heavy losses recently.

FOOD MANUFACTURERS' ASSOCIATION.

THE board of directors of the Food Manufacturers' Association gave the press a reception at Madison Square Garden, New York, on Saturday afternoon, the 5th inst. The reception was well attended.

The object, as stated by the secretary of the association, "was to establish close and cordial relations between the press and the managers of the food exposition which it is proposed to hold at Madison Square Garden, New York, in October, 1892, under the auspices of the Food Manufacturers' Association."

"The real importance and magnitude of this great work upon the part of the association was not clearly understood by the press until this meeting, when it was made perfectly plain by the gentlemen present who are interested in the undertaking."

"Mr. Johnson, of *The New England Grocer*, responded for his section of the country, stating that he believed the food movement should be conducted by the food manufacturers themselves; and that any effort made by the latter towards im-

proving our food supplies would not only redound to the benefit of the manufacturers, but to the grocers as well, the interests of the two being so closely allied that the grocery trade could not but be greatly benefited by the coming exposition. Other speakers were Mr. C. F. Bussing, editor *Retail Grocer's Advocate*; Mr. Paul V. Flynn, editor *New Jersey Trade Review*; etc."

While we are not fully advised as to the details regarding the objects of this association, if it will take in hand the various adulterations in food products it will have a great field in which to operate, and be the means of doing an unlimited amount of good.

RETALIATION BETWEEN BRITISH AMERICAN PROVINCES.

Canadian Millers Much Excited.

OUR neighbors, the Canadian millers, are very much excited just now on account of the action taken by Newfoundland. She having imposed an import duty of 50 cents per barrel on Canadian flour. Just as the meeting of the Dominion Millers' association had adjourned a dispatch was received from Messrs. Campbell & Stevens, of Chatham one of the largest milling firms in Western Canada, which read as follows: "Cancel all Newfoundland business. Present action of our government taxing Newfoundland goods has induced them to put 50 cents differential duty against Canadian flour." On receipt of this dispatch President Goldin, of the Dominion Millers' Association, called together some of the members that had not yet left the city, and they adopted the following: "Resolved, That the secretary be requested to ascertain from our Government whether the increased duty on flour into Newfoundland is specially directed against Canadian flour. If so, that the Executive Committee be instructed to take steps at once to lay our case before the Government with a view of having the increased duty put back."

Mr. Carruthers said: "During the past season we have shipped 30,000 barrels of flour to Newfoundland for the Norris Mills of St. Catharines. This extra duty will simply prevent us from competing with American flour in that market, and kill our flour trade with Newfoundland completely. St. Louis flour is now our principal competitor. Flour is the largest article imported into Newfoundland from Canada, and this retaliation hits us, therefore, in the worst place it possibly could, which is, no doubt, the intention of the Newfoundland government."

THE NORTH STAR FIRE.

REGARDING the North Star Boot and Shoe Company loss, Mr. O. B. Hall, of the Walworth Manufacturing Company, says: "We have no positive knowledge regarding the condition of the sprinklers in the North Star Boot and Shoe Company's building. The equipment was installed by a concern in St. Paul. It had for a source of supply a small iron tank, which was two-thirds full of water and one-third of compressed air. This in cold weather, of course, was held back by an air machine. It is our opinion that if everything was in operative condition at the time of the fire, it would be a very unusual occurrence to have water enough in the tank to completely fill the pipes, to say nothing of ejecting any on the fire. Will write you more fully as soon as we hear from them direct. The equipment is hardly worthy of any consideration as an automatic sprinkler protection, but in no sense can they blame the Walworth sprinkler, in this case or any other, and our competitors may be as lively as they please in misrepresenting the facts; until they can show us that the Walworth sprinkler is not operative after being installed any length of time, we shall claim great superiority over theirs."

THE ONE-MAN POWER IN MUTUAL INSURANCE MANAGEMENT.

REMEMBER the voice of the nimble, thimble nigger:—"Now you see it, now you don't." Who gobbles the ripened fruit?

As we go to press a dispatch announces that Philander B. Armstrong, manager, president and chief organizer of what is known as the "Armstrong Trio," composed of the Mutual Fire Association and Armstrong Fire Insurance companies, of New York, had reinsured their entire business,

ORGANIZATION OF MILLERS IN THE UNITED STATES.

THE MILLERS' NATIONAL ASSOCIATION.

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*Chas. J. Martin, Minneapolis.....MINNESOTA.....
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*Geo. Urban, Buffalo.....NEW YORK.....
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CORRESPONDENCE.

[The following letters are all from our own special correspondents, and reflect their views and the views of the trade in the location from which they write.]

OUR BUFFALO LETTER.

Mr. Riley Pratt's Elevator Experience Not to be Repeated If He Knows It—Mr. Gatchell, Late Superintendent of Buffalo Elevators, Made Commissioner of Public Works—Schoellkopf-Mathews et al. vs. Wright—The International Elevator Sold to E. W. Evans for \$73,000—And Still Another Buffalo Suit on the Carpet—New Manager for the Queen City Elevators—Winter Wheat Well Sold—George Urban's Milling and Political Success.

MR. RILEY PRATT knows all about elevators now, having been baptized and duly initiated into the mysteries connected with a real live transfer-house, such as Buffalo boasts of—not the Chicago kind, with which he is probably familiar. It happened all in an hour on a bright day when the creek was jammed full of vessels. Riley wanted to see the jam, and also expressed a desire to go through City Elevator A. In company with his friend O'Brien they were piloted through the first door all right, but ten feet inside it was dark as a pocket. Superintendent Prouty led the way, O'Brien next, and Pratt followed, stepping high as a turkey in wheat stubble. As they neared the first "conveyor" the superintendent in his usual curt manner called out, "step high and keep to the left." The next second Riley was being conveyed along on a canvass belt at the rate of forty miles an hour, having fallen through the bridge. Luckily for Pratt the big superintendent is an active, strong man, for no sooner did he hear the sound of a falling body than he knew what had happened, and starting on a keen jump he caught the elegant form of Riley just at the edge of the pit into which he would have been dashed if Prouty's arm or the seat of Pratt's pants had given out—like so much corn. Riley was a sight to behold when brought out into the light for examination. "Is this the Primrose of the Exchange I walked down with?" asked O'Brien. "Damn you; didn't I tell you to keep to the left and step high?" thundered the superintendent. Pratt paused, his eyes rolled, his appearance betokened murder! But he paused again, and to this second of cool contemplation the two gentlemen undoubtedly owe their lives, for instead of the bursting of a mighty storm at these cruel taunts, the poor dust-begrimed grain merchant meekly remarked to himself: "I did as I was told, stepped high and kept to the left. Trolley cars run fast; conveyors run fast; I must be slow." It took an hour to get the dust out of his clothes, and during that time nor until he reached the hotel did he utter a word.

Mr. George S. Gatchell, manager of the Associated Elevators, has been appointed to the position of commissioner of public works. Mr. Gatchell is a country boy, and has the usual luck of a hayseed in the city.

The great topic on 'change this week was the Mathews-Wright trial for blood, not money. It was to prove who lied. Not that the members did not have an idea who was doing it, but Messrs. Schoellkopf, Mathews and James were determined to show that the Wrights had first attempted to cheat them out of half a cent on 600,000 bushels of wheat and then lied about it. The trial resulted as everybody, except the Wrights and a few biased friends who hate Mathews for personal reasons, expected it would, viz., in favor of the millers. There was really no defense worthy of consideration outside of the testimony of young Wright, and it was evident when the lawyers got through with him that not a person in the room believed what he said. The most pitiable witness for the defense was Wright, Sr., who contradicted himself in every important particular. Everybody was sorry for the old man, who no doubt was brought to this plight by his willful son. The legal talent engaged by either side was brilliant, and cost many times the money involved. But Schoellkopf et al. cared nothing for damages; the trial so far as they were concerned was to maintain their business honor and close calumnious mouths. No attempt will be made to collect the damages, it is said. A stay of proceedings for ninety days was asked for, but the great case of Mathews vs. Wright is ended forever.

Steve Sherman was in the city again to attend a rehearing of his old case of grand larceny for which he stands convicted. The judge sent the case to the court of appeals for review. The old hustler looks well and acts as chipper as ever, but would say nothing about his present business prospects. His mother was with him and appeared to furnish the money to keep Steve out of jail. It is a remarkable coincidence that Stephen Sherman should have been passing through the hall just after leaving the court room and be a witness to the sale of what was considered by a lot of lawyers to be a white elephant. The International elevator was one of the first built by Sherman with money furnished by lawyers and a rich coal man. It was intended for Canada barley, and small vessels could easily be unloaded at that point, but still like nearly all of Sherman's ventures it proved a dead failure. There it was a valuable piece of property eating itself in interest, and it was finally decided to let the sheriff sell it. It was singular therefore that Steve should be walking past at the very moment when this elevator, which furnished about all the evidence necessary to convict him of grand larceny, was being sold under the hammer. The bidders were few, very few, but he saw something important was going on. "Let us see this sale," said he to his companion, and when the sheriff read the "sale" a smile of satisfaction was noticeable in his face. "It's the best piece of property in the lot," he remarked quietly. The only bidder present was Mr. E. W. Eames, in

fact the only man present who had the grit to buy the "white elephant." Not another in the city would have thought of purchasing it at the time. The elevator was handed over to Mr. Eames for the sum of \$73,000, which covered all claims. As soon as the name of the purchaser was announced everybody looked surprised, and grain men began to figure on the big plum which had slipped out of their mouths. The next morning Mr. Eames was offered \$30,000 for his bargain. He refused this, and the following day turned over a half interest to Mr. McIntyre of New York at a price not mentioned. Its another lesson that the "shoemaker should stick to his last." A long time will elapse before the legal fraternity will again indulge in elevator property. This storehouse cost twice the sum paid by Mr. Eames, and is as good as new with every prospect of paying as well as any elevator in Buffalo.

The suit of George T. Chester, miller of Lockport, against Daniel E. Newhall comes up again this week in Buffalo. The case is one growing out of a series of deals in wheat dating back to 1889, when the crop of No. 1 of 1888 went up to \$1.45 per bushel. Mr. Chester, who is pleading the baby act, was in a position to close out his trades with a profit of \$70,000, and was advised to do so, but he knew better like all young traders. His loss was at least \$125,000, and the present suit is to prevent the foreclosure of a \$30,000 mortgage held by Mr. Newhall against the mill. Some of the wheat which cost this young man \$1.30 was sold at 92 cents per bushel. The claim of a gambling debt is too small for our judges, and Mr. Newhall is certain of winning the suit.

Mr. Wm. J. Rairdon has been selected from a number of applicants for manager of the Queen City elevators, and a good choice it is. Mr. Rairdon is a bright young business man with the necessary push bred into him to make a success of these elevators, which is something that could not be said of them heretofore. His father is well known in Chicago insurance circles.

The Buffalo millers having the wheat cargo sunk with the steamer Brazil received 106 per bushel for it. There is some profit in it for the millers, quite a bit more than grinding it, still Schoellkopf & Mathews and A. R. James would prefer the wheat as it was a selected cargo.

The mills in this section are all going full time but on old orders and many of them are still behind a month or two, Urban's mills being among the latter. This new mill is turning out an exceedingly fine brand of flour. Buyers say it far exceeds anything they have used thus far. Mr. Urban is in receipt of many congratulatory letters. Prices are satisfactory, but sellers find it hard work to get new orders at \$5.10@5.20 for patent spring and 5.00 for winter.

Competition is going to be brisk for the city trade. Pillsbury is in the field making fresh effort to secure new customers. C. J. Bork has moved his office from Attica to Buffalo leaving only a clerk at the mill. The Akron mills have engaged W. P. Andrews to drum up trade for them and Harvey & Henry are also working like beavers to add new buyers for their best brands.

It was quite a stroke of good business on the part of Mr. C. W. Newman to whom the credit is given of securing the services of so able a man as Mr. Andrews. Wm. P. is known in every grain market in this country as an active honest business man with a thorough knowledge of the trade in all its branches. I predict he will make the best agent the Newman's could have found in the state.

There is something like 300,000 barrels of store here, all receipts by lake. This is being drawn upon by the roads as fast as possible, and now that the Duluth trade is closed no further accumulation is likely. In my last letter I said we would have a

larger amount of grain in store here for millers than ever before in the history of Buffalo. Such is the case to-day, but with all this vast quantity the offerings are very light. An order for 5 boatloads of No. 1 hard could not be filled any day last week, in fact there was only 15,000 bushels for sale in an all rail house. Duluth wheat sellers, to a man, were out of the market this week. It begins to look as if higher prices are expected.

The receipts of Manitoba wheat from Fort Williams for the season foots up 1,600,000 bushels. This is all destined for Scotland and England via New York and goes in bond. The custom house inspectors have had their hands full taking care of it as every cargo is closely watched until the last car load is under way. Much additional help was engaged by collector Morgan who has done his best to give this wheat quick dispatch. Still the Canadians grumble at delays of a day or two, when a large number of America vessels have been loosing from \$500 to \$700 per day for a week or 10 days.

Complaints of poor quality of spring flour from the new crop have almost ceased, millers as a rule having caught on to the trouble and it is now said the product is superior to old wheat flour.

Milfeed is both scarce and dull. Spring and winter bran are quoted at \$17.75@18.00 with little to be had at either price.

Rye flour is selling at \$5.25@5.50 per bbl in this market. Such a price was never known before. The difference between spring patent and rye has never been more than \$1.75 and now it is above the price of patent.

The 300,000 bushels of Dalrymple wheat in store here has not yet been touched. Sandrock has always handled that wheat and made money for its owners. Rochester millers have been in the city looking for engines to run their mills. The far-famed Genesee river has been steadily dwindling in power and in spite of a startling discovery, viz: that the water was being diverted into other streams the time is not far distant when steam power will turn the rolls in all the mills of Rochester.

The receipts of grain and flour at this port for the season to date show the enormous increase of 45,000,000 bushels, estimating flour as wheat, over last year which was the largest by 3,000,000 on record. The figures are grain 29,000,000 bushels, flour 32,000,000 bushels.

During the past two weeks not less than 2,000,000 bushels of grain, and as high as 4,500,000 bushels were afloat in the creek here on any day. How to dispose of this with the railroads short of cars, the canal closed, and the elevators almost full has kept the grain trade busy thinking and set the elevator men wild. A short cold snap would have settled the question for them, but it did not come. Storage room was at a premium, and as high as \$500 was paid by vessel captains for the privilege of going to an elevator first. The present jam is not without its lesson. It will work good to the canal by teaching the shippers that the railroads at this point cannot be depended upon to move the crop in two months. The canal would have helped the matter considerably even during the last two weeks, but the railroads refused to let go of a single bushel. The blockade will result in serious losses and involve no end of litigation. The poor canal did not hold its own during the season, the amount of grain taken being 4,000,000 less than last year. While the railroads carried 66,000,000 the canal only took out 43,000,000 during the same time.

Assistant Secretary Daly, of the Merchants' Exchange, will send in his resignation on the first of January. Playing second fiddle to a poor first is not in his line and his services can command more money besides some slight appreciation anywhere else than in the Merchants' Exchange. His illness and that of the secretary's at the same time, for three

months, showed the exchange that both of these gentlemen could be dispensed with. The next board of trustees must show a reduction in expenses or the financial standing of the exchange will suffer. Thirty-four certificates were sold at action on the 1st inst. at an average price of \$30.00 each. This looks very sick.

Mr. George Urban has been elected chairman of the Republican county committee. This position is considered a great honor among politicians. Whether Mr. Urban appreciates the office may be inferred from the following answer said to have been made to a friend who, while congratulating, asked why he had gone back into politics again: "Well," replied gentle George, "I did it to complete the deal. You know that when a man accepts the position of chairman of the Republican county committee he is buried, politically, beyond all possibility of resurrection." Mr. Urban is too much of a family man to take kindly to political life.

Buffalo, Dec. 10, 1891.

OUR NEW YORK LETTER.

Breadstuffs—The Russian Scare Over—Interstate Commerce Regulations Not Being Observed—Car Famine Interferes With the Grain Trade—November Corn Corner.

THE breadstuffs markets have undergone considerable change during the past month, but have left no general or decided gains, either with the bulls or bears. The Russian scarecrow that dominated the markets, both of Europe and America, the previous month has had little or no effect on prices, since the prohibition of wheat exports from that country actually went into force. This was the first disappointment the European bulls had met with on this crop, since the beginning of which, they had played the bull side of these markets so successfully. This was to have been their highest trump card, as it was their last, and all Europe loaded up in advance of the promulgation of the ukase, expecting that America would do the bulling afterwards, and enable the other side to unload at a big profit. But the bear elements in the situation have all been on this side of the water this year, and the bull influences on the other side; while the buyers have been subject to the latter and the sellers to the former. Hence the anomaly of the bulls being the buyers, and the bears the sellers on this crop, is what has been beating the European longs of late, as it did the Chicago shorts on the early and enormous movement of the new crops, for prices then advanced; whereas they have lately declined on the smallest receipts of the season.

As a result the American and European markets have become suspicious of each other, and have sympathized more closely than they did on the advance of last summer. In fact they have been playing at hide and seek, each waiting for the other to do the bulling; and running away from each other on every decline. This is the result of the continued and heavy arrivals of all kinds of grain, excepting corn, on the heavy forward purchases of the previous six months, until nearly every market in Europe has been buried under oversupplies and increasing stocks, which they are compelled to carry until consumption shall overtake them.

Until after the holidays, therefore, Europe has been practically out of our markets as a buyer except to fill all contracts, against which options had been brought months ago, and resold or exchanged for the spot wheat as the shipments become due.

This has been the chief business in the export lines for the past month, except in certain grades of flour which have been taken moderately, for both English and continental markets. These include spring patents and Bakers' extras at about \$5.00 in sacks for the former and \$4.30@

4.40 for the latter; while winter straights in sacks have brought \$4.50@4.60 and clear winter \$4.35@4.45. No. 1 winter has also been taken fairly at \$4.00@4.10 in sacks, while all grades below, and especially spring, have been neglected, until they have accumulated for the first time on this crop, and declined more than the medium and higher grades, which had been sold ahead by the western mills, direct to the other side, well into January and even February. This has been especially true of the merchant mills throughout the spring wheat sections which have export connections.

The result has been a smaller export trade in this market on this crop than on the short crop of last year, so far as the flour trade has been concerned. In fact the home trade has been smaller than a year ago, for the reason that western mills have sold enough of their high grades for export to enable them to dispose of the balance of their product to interior and eastern markets, at 15 to 25 cents per barrel more than the New York price.

One of our largest receivers made the statement that "were it not for their country mills they would not have stock enough to supply their home trade." A canvass of our larger commission houses found this state of affairs to be general except in the case of agents of a few of the large syndicate mills; and it showed that as a whole the flour sold on the New York market has been less on this large crop than it was on the last short crop. The reasons given for this are various; the chief being that through rates of freight from the west to Europe are said to be sufficiently lower than rail rates to New York and ocean rates hence to Europe combined to enable the western mills to sell direct, on the other side, on c. i. f. terms, at 10 to 20 cents per barrel more than to send them here to be sold to local shippers. This is claimed to be due to a violation of the interstate law, and of that commission's decision of two years ago, in favor of the Produce Exchange against the Trunk Lines which were instructed that the through rate must be equal to the inland rate to the seaboard and the ocean rate added. But decision and law alike are said to be a dead letter and the railroads as usual, a law unto themselves. Others say that the law is technically observed by the railroads themselves, who charge full rates to the seaboard, but that the ocean steamship lines pay a rebate on the other side to the importers there, which is outside the jurisdiction of our laws, and that the railroads here stand their proportion.

But a more serious condition of affairs has been produced in the grain trade, by the car famine in the west, owing to which receivers and c. i. f. buyers here are "in a hole," on their deliveries to exporters, as the Trunk Lines gave notice soon after the first of this month or on the close of navigation that they could furnish no more cars for grain to the seaboard from Chicago and other interior points until further notice. On inquiry of the Trunk Lines here it is found that most of them have already contracted for all the grain they can haul to the seaboard until into February. They charge the fault on the western roads which take their cars and keep them for local traffic in the west and south, instead of returning them loaded with grain to their owners, the Trunk Lines, with seaboard shipments.

Damage has been charged on their cars borrowed and kept without leave by the poorer western roads and those south which are unable to buy new rolling stock. If the older and wealthier Trunk Lines could get their own cars back they claim they should be able to accommodate even the immense grain movement of this year. Hence they have not until recently ordered the new cars they should have ordered three months ago, when the short crops in Europe and large ones here were assured.

The squeeze here in November corn culminated in an 80c cash market and some pretty severe losses though the price of old corn has not fallen below 70c since, so small is the supply.

The Field-Lindley-Weichers failure had some mysterious connection with this November corner, it was believed, though denied, as well as with the one attempted in September, and unsuccessful. But the mystery of the failure is rather growing deeper than clearer with the lapse of over a week without any statement whatever from the firm or its assignee.

City mills have not changed their stereotyped price of \$5.25 for West India brands and \$5.50@5.65 for patents, for over three months, except when a break was reported to have been made by Jones & Co. to get into some new market, when a few thousand barrels were said to have been sold at \$5.00. They are getting 90c for their feed.

NEW YORK, December 14, 1891.

OUR ST. LOUIS LETTER.

St. Louis Letter.—Mississippi River Improvement Convention.—Flour Report.—Heavy Receipts of Wheat.

THE Mississippi river improvement question between Mayor Noonan and the Merchant's Exchange has not improved any. The subcommittee of the Merchant's Exchange met last week and after the work of organization was finished the subject of a permanent representation at Washington was taken up. No selection was decided upon, but a majority of the committee favored the appointment of some ex-congressman. The meeting adjourned subject to the call of the chairman.

Mayor Noonan does not regard his co-operation with the Merchant's Exchange river committee as a promise to do nothing towards improving the river without consulting them, for only a few days ago he addressed a letter to Major A. M. Miller of the United States Engineers asking him to prepare a project and estimate of the cost of the work on proposed improvements made by himself and other municipal members.

A meeting of the North Missouri Millers Association was held at Moberly last Tuesday. Reports of the condition of the wheat crop amount in miller's hands and the amount yet held back were submitted. Out of twenty reports, two reported fair crop prospects and eighteen reported conditions much below the average. The average was said to be about the same as last year, stock on hand was placed at 437,000 bushels in millers hands and 17 per cent of crop unmarketed. These reports were from some fourteen different counties.

WHEAT.

Receipts heavy for the season of the year and keeping up to a big average even for this record-breaking crop of 1891. We received 496,065 bushels the past week, against 451,693 bushels last week, while arrivals so far this year amount to 23,290,715 bushels, against 10,864,000 bushels corresponding time last year. Shipments from this point for the week just closed were 319,748 bushels, against 413,257 bushels the week before; and 14,178,499 bushels since January 1st, against only 3,565,067 bushels same time in 1890.

Withdrawals from elevators for week ending yesterday were 38,553 bushels for city consumption, 151,178 bushels for rail shipment, but none out via river for export.

May wheat closed yesterday exactly where it was the Saturday before at 98½c. It sold up to \$1.00½ Friday on the receipt of the Government report, but the market soon settled back.

FLOUR.

Receipts 27,609 barrels this week, against 28,546 barrels last week. Shipments 46,919 barrels. Compared with 50,959 barrels last week. Price of flour

did not respond to the advance in wheat. Although the feeling was firm, nor was there any appreciable increase in the demand while the volume of business publicly transacted on 'change continued small, southern demand ran light, export trade fair. Sales otherwise during the week were in small quantities, buyers taking supplies as their orders called for them. Extra fancy in better request than anything else and sold at \$4.20@4.22½ Monday, \$4.20@4.25 Tuesday, \$4.20 Wednesday, \$4.25 Thursday, patents lightly dealt in at \$4.50@4.60 delivered. Reported sales average only 2,000 barrels daily.

CORN.

The new crop is not moving with the rush that was expected. But all that comes finds quick sales, the demand is healthy and strong. So eager were buyers, that prices were advanced over last Saturday's quotations; yesterday's sales being 1@1½c higher for the week and market stiff at that.

NOTES.

His Eminence Cardinal Gibbons and other distinguished dignitaries of the Romish church visited the Merchants Exchange last week, speeches were made by several of the Bishops, that of Bishop Ireland, who by the way is a great advocate of the river improvements, referred to the great growth of commerce and said the only drawback was the present condition of our rivers. The venerable Archbishop Kendrick also said a few words it being his first visit to the St. Louis Exchange. President Bernheimer greeted the party and in the name of the Merchants of St. Louis thanked them for their visit.

Daniel Shueth a well known miller of Mascouthis died Tuesday, age 37, he was highly respected by all who knew him.

Frank Feiner obtained judgment for \$2,100 against Mountel, Borgess & Co. this week.

Chas. L. Dean, at one time a fast freight agent in St. Louis but now located in Chicago, was on 'Change last week and says that eventually wheat will sell at \$1.25. Mr. Dean has quite a reputation as a market prophet. Several years ago he predicted a 35 cent advance in wheat and cleaned up about \$40,000 on his deal.

A party here is reported to have a vessel at an Atlantic port awaiting the corn to load it with, and the demurrage charge upon this vessel is \$250 a day. The charges now amount to \$3,500 and no more show for obtaining cars than two weeks ago.

President Bernheimer, of the Merchant's exchange, and all our leading merchants are busy getting subscriptions to present the poor of this city something in the way of wearing apparel for Christmas; the right ones have it in charge and meeting with great success.

FUTURE GREAT.

St. LOUIS, December 14, 1891.

OUR LONDON LETTER.

Unsettled Condition of the Markets Caused Partly by the Russian Imperial Decree—Flour Quotations—United States Supplied the United Kingdom With Two-Thirds of the Flour Imported Last Year, and so far This Year Over Three-Fourths of Its Imports of Flour—Meeting of British and Irish Millers This Month—Tricks of the Trade—The Action of the Hungarian Millers Reducing in Number the Grades of Flour They Make is Proving Very Satisfactory to Buyers.

IN consequence of the issue of an Imperial Decree, prohibiting the export from Russia of all kinds of grain except wheat, an advance took place on the first Mark Lane Market Day in the month of November, of two shillings a quarter on wheat and foreign barley, oats and maize, and by the ninth of the month prices had advanced without indicating any finality. In the meantime English millers had bought largely of wheat for forward delivery and are now fairly stocked for the winter months. During the third week of November it was only the published threat circulating through Europe

that a Russian prohibition of wheat was probable, that kept the prices of the week previous up, although the heavy deliveries on the market by foreign sellers and home farmers had the effect of making the Russian prohibition of wheat export which was published on the 21st November fall very flat. On Mark Lane on the 23d there was not much change, and it was only towards the close of the market that the top-price millers advanced their flour from 39 shillings to 42 shillings on the strength of the hardening in the price of wheat. Tuesday however saw a reaction in business, and to effect sales a little less money had to be taken for wheat. Wednesday and Thursday registered further weakness all over the country, and last Friday sixpence less was taken on Mark Lane for wheat. Saturday's country markets gave way one shilling, and yesterday on Mark Lane every one was in a "fog" and the price of wheat again fell, although no concessions were made in flour. At the close of the market there were signs of reviving confidence, and before Christmas prices will be higher.

The following table shows the weekly sales and average prices of wheat, barley and oats sold in 187 towns making returns to the Inspectors and Officers of Excise during the past two months:

Date 1891.	WHEAT.			BARLEY.			OATS.		
	Quantity Sold.	Average Price.		Quantity Sold.	Average Price.		Quantity Sold.	Average Price.	
Oct. 7	78,538 3	34 4		29,869 6	28 10		11,498 5	18 5	
14	85,191 3	33 10		67,353 7	28 11		15,699 5	18 5	
21	83,013 5	34 9		92,370 6	29 6		15,183 4	18 10	
28	82,375 2	35 2		128,859 5	29 11		16,191 7	18 8	
Nov. 5	71,727 3	35 11		136,096 7	30 7		14,641 0	19 5	
12	71,989 7	36 2		162,033 0	30 11		15,534 2	20 6	
19	80,429 5	37 7		194,363 4	30 11		18,385 1	21 4	
26	87,104 4	38 9		221,896 4	31 3		21,750 3	22 4	
3	74,194 4	39 1		179,068 6	30 11		20,401 6	22 4	

The following are the quotations of American flours on offer on Mark Lane yesterday; Pillsbury best, 34s.; Pillsbury Improved Straight, 31s. 6d.; Morrison's Superlative, 33s. 6d.; Washburn gold medal, 34s. 6d.; Washburn, No. 1, 31s. 3d.; Iron Duke, 31s. 6d.; Christian's Extra 32s.; Sterns' patent, 32s.; Daisy Mill Tip Top patent, 33s. 6d.; Mangeold patent 32s. 6d.; Yaeger Milling Co.'s Anita Patent, 34s.; Yaeger Bros.' best, 34s.; Yaeger Bros.' Crownpoint, 33s.

The returns of the imports of wheat and flour into the United Kingdom, which has just been published in detail, show that the United States last year sent the United Kingdom out of a total from all countries of 6,309,334 sacks of flour, 4,811,320 sacks of 280 lbs., whereas Germany, Austria and Hungary together only sent 905,890 sacks of flour. And during the first nine months of the present year—1891—out of a total of 4,873,328 sacks of flour, 3,873,241 sacks were from the United States 523,952 sacks from Austria, Hungary and Germany.

The National Association of British and Irish Millers are thinking of holding a general meeting this month, at which it is proposed that two papers connected with milling should be read and discussed. It is, however, not yet decided that it will be held, as some members think that a month of two later would be a better time to call it.

The following advertisement is cut out out of *The Miller* of the 23d of November, and will give the American miller some idea of the tricks played in the Flour Trade on this side. To be certain of creating a higher class of American flour the manufacturer and not the factor should register a Trade Mark, and advertise their brand in the English papers, so that the bakers may demand the brand and be sure of getting it, and not be palmed off with an inferior flour, as is often the case when the flour asked for is above the price the factor wishes to supply the baker with. Competition has become so keen in the United Kingdom, that there are firms who will if they can obtain a profit, sell an inferior article as that manufactured by a well-known mill, whereas they know anything but what they represent it to be. The

advertisement referred to above runs as follows:

PERPETUAL INJUNCTION. DAMAGES AND COSTS.

1891. A 276.

IN THE CHANCERY OF THE COUNTY PALATINE OF LANCASTER (LIVERPOOL DISTRICT).
BETWEEN JOSEPH APPLEBY & SONS, PLAINTIFFS,
AND JOSEPH FRANCE, DEFENDANT.

WHEREAS I, the above-named Defendant, JOSEPH FRANCE, of St. Helens, and Wigan, Corn Dealer, have sold Flour in sacks of Messrs. JOSEPH APPLEBY & SONS, of Enfield Mills, Accrington, and of Blackburn, Burnley, Bootle, and Liverpool, Millers, marked with their trade-mark, which I represented to be their well-known "S Standard" quality, but which flour was not made or selected by them, and was of inferior quality to their flour; and whereas Messrs. JOSEPH APPLEBY & SONS, on the 24th day of October, 1891, commenced the above action against me for a perpetual injunction to restrain me, my servants, workmen, or agents from selling or from offering for sale in bags marked with Messrs. JOSEPH APPLEBY & SONS' trade mark, or with any imitation or colourable imitation thereof, any flour not manufactured by or selected by or imported by them, so as to induce purchasers or intending purchasers to believe that the said flour was flour manufactured, selected, or imported by Messrs. Joseph Appleby and Sons, and from otherwise infringing their trade-marks. Now I hereby inform all persons that I have consented to a perpetual injunction against me in the terms above mentioned, together with damages and full costs, and hereby tender to Messrs. JOSEPH APPLEBY & SONS my APOLOGY, and express my regret for having sold flour of an inferior quality purporting to be their "S" Standard flour, and in their sacks, marked with their trade name, which was not their flour. This Apology is advertised at my expense, so that as full reparation as possible may be done to Messrs. JOSEPH APPLEBY & SONS for any injury they may have sustained.

Dated this 31st day of October, 1891.

JOSEPH FRANCE.

Witness to the signature of Joseph France:—
JOHN S. HOPWOOD, Solicitor, Wigan.

BARRELL, RODWAY, BARRELL &

WILKINSON,

14, Harrington Street, Liverpool,
Solicitors for the said Joseph Appleby & Sons.

It is to be hoped that the lesson Mr. France has had will stop others from continuing the same deception with some foreign flours.

Your correspondent has noticed during the past two months indications of labor disturbances in different parts of the United Kingdom, and in several instances in the milling and corn trades the men threatened to strike if their masters did not make certain concessions demanded by their unions. Some idea of the state of the labor market can be obtained from the report published by the labor correspondent to the board of trade, which states that during the month of October the labor market continued to be in a disturbed condition with more frequent strikes, and the report goes on to state that the total number of strikes recorded for October was eighty-one, whereas during the month of September the total number was sixty-four.

The bakers are delighted with the action of the following sixteen firms who manufacture Hungarian flour and export it to England, namely the Concordia Steam Mill Co., Lim.; Elizabeth Steam Mills Co.; First Budapest Steam Mills Co., Lim. (Erste Ofen-Pester); Gizella Steam Mills; Henry Hagenmacher, Steam Flour Mills, Budapest; Louisa Steam Mill Co., Budapest (Hungary); Pannonia Steam Flour Mills; The Pesth Cylinder Flour Mill Co., Lim. (Pesth henger-malom-társaság—Pester Walzmühl-Gesellschaft); The Pester Millers and Bakers Steam Flour Mills Co., Lim., Budapest; United Steam Mills of the Hungarian General Credit Bank; "Victoria" Steam Mills, Budapest; Losonczer und Hatvaner Dampfmühlen in Losoncz; The Borsod Miskolcz Steam Flour Mill Co., Lim., in Miskolcz; "István" Steam Mill Co., in Debreczen; The Nagyvárad "László" Cylinder Flour Mill Co., Lim., in Nagyvárad; The Szatmár Steam Mill Co., in Szatmár, who have reduced the number of their grades of flour and established a fresh standard, and in order to protect their new type flours they have as a body caused a conventional trade mark to be registered. The flour manufactured by the above named firms will consequently henceforth only be sold and supplied in sacks sealed with leads bearing the registered trade mark, which consists of the number of the grade of the flour sur-

rounded by a triangle composed of three wheat ears on the side of which the letters M. T. are to be seen. The other side of the lead-seal is used to stamp the name of the firm who manufactured the flour.

Four millers are serving this year which commences on the 9th of November the office of Mayor in their respective cities, namely Mr. William Smith of Messrs. Walmsley & Smith at Lancaster, Mr. J. Richardson the well-known miller of Sunderland, Mr. Wilson Marriage one of our foremost millers in the Eastern Counties at Colchester and Mr. Yeatman at Poole. Although millers do not mind giving up a portion of their time to municipal duties we have not one miller who occupies the position of member of parliament.

The returns of the imports and exports of Sweden for the nine months ending the 30th September continue to show some falling off in trade and the only article which shows an important increase is the extort of oats, which during the nine months increased from 14,079,000 kilos in 1890 to 152,628,000 kilos in 1891. In the same period the importation of wheat has increased from 31,801,000 kilos to 55,126,000 kilos which should be particularly noted just now by those engaged in the American grain trade as Russia cannot supply any wheat on account of the prohibition of exporting cereals from that country.

X Y Z.

London, December 1st, 1891.

INQUIRY.

La Crosse, Wis., December 8th, '91.

Editor United States Miller:

Dear Sir—I have heard it stated that a yield can be taken daily, if necessary, without weighing up the wheat (by portable scale or otherwise) taken in while mill is running. In fact that the amount of wheat in the mill before and after the yield has no bearing upon the amount used to make a barrel of flour. Will you please explain, for the information of myself and other dusties, how this is brought about?

A NORTHWESTERN DUSTY.

In reply to our correspondent we will say, that in order to get a satisfactory yield by the method he refers to, certain requisites are necessary. The mill must be so arranged that all the offal and the flour can be packed simultaneously; and the conditions regarding the amount wheat and meal in transit through the mill must be the same at the time of packing out as when the test was begun. Then the only element of uncertainty is the amount of absolute waste, such as evaporation and dust carried out, that is not accounted for in the weight of the offal.

Every miller knows, or should know, about the amount of total wastage his mill produces. This item varies from four to ten pounds per barrel.

We will suppose you start to take yield at six o'clock a. m., flour and feed bins empty simultaneously. They are emptied in the same manner every morning, and each morning a record kept of the barrels of flour and the amount of feed made during each twenty-four hours. The amount of material in transit through the mill under such conditions will vary but a trifle.

We will say the wastage is six pounds per barrel. This multiplied by the number of barrels of flour made and added to the weight of the flour and the weight of the offal will give you the number of pounds of wheat ground in each twenty-four hours. Reduce this to bushels and divide by the barrels of flour made and you have the yield of wheat per barrel.

We know of mills taking their yield in this manner every twelve hours, and the flour yield taken at grinding out, varies so little from the daily yield, that when a mill is fitted to carry out the system, the method is considered a very accurate one. There is no extra expense or labor in connection with this method. It is simply a strict adherence to a very satisfactory system.

MILLS, MILLERS AND MILLING.

The Attica Flour Mills, Attica, N. Y.

The Attica flour mills have proven a success since Chas. J. Bork, of Buffalo, became its proprietor. Mr. Bork bought the mill about sixteen months ago; its capacity at that time was 300 barrels per day. At the end of six months the business demanded a much larger output in order to keep up with orders. To do this it required more power, to supply which Mr. Bork purchased a 250-horse power Tift Corlies engine. While this was being placed, Head Miller L. C. Schroeder made a general overhauling, added two pair 9x24 inch rolls, one new purifier, one Smut machine, ten dust collectors, and two round reels—with this new outfit the mill is making 500 barrels per 24 hours, of which Buffalo consumes about half, the local trade outside of Buffalo takes on the average 100 barrels per day, and the balance finds ready sale in Boston, Hartford and Rhode Island. Three qualities of wheat are used. Their experience has taught them that "blended" flour suits their trade best for bread making. About 10 per cent. low grade is turned out, which finds a ready sale in Boston, at good prices. The mill has, in addition to its 500 barrel capacity of wheat flour, a complete buckwheat outfit. The Attica mills buckwheat flour has a wide reputation. An order for two tons for Albany, Texas, is now being filled. A few days ago they shipped an order of 1,000 pounds to Jamestown, Dak. They also manufacture granulated meal. All offal is sold at the mill door, the mill being unable to supply the home trade for feed, the deficiency is shipped in by car from the West. The mill is doing a good paying business. L. C. Schroeder, head miller; A. C. Gillespie, manager; George L. Bork, cashier.

Some Oshkosh Mills.

BROOKLYN MILLS, ROLLER PROCESS, Schmidt Bros. & Co., proprietors, report business fair. Local trade taking their flour, as its reputation is well established. Trade in feed good. Buy their wheat from farmers; price 93c to 95c; quality averaging about No. 1 Northern.

RELiance MILLS, ROLLER PROCESS, Ferdinand Laabs, proprietor, says, trade fairly good. Buys wheat on street for his needs; price 90c to 95c, grade running from No. 1 to No. 2 Northern; winter 85c. Finds market at home for most of his product, though shipping some Baker's and some brands to New York and Chicago; capacity 125 barrels in 24 hours.

WAKEFIELD MILLS, ROLLER PROCESS, the Foote-Cornish Milling Co., limited, proprietors; capacity 200 barrels. Brands, "Pride of the West," "Straight Grade," "King of the Forest," "Queen of the Valley." Trade satisfactory with fair margins. Buys some wheat at other points. Street prices range from 90c to 95c at mill door; quality comparing fairly with No. 1 Northern. A portion of product goes to Bristol and Glasgow and the seaboard.

F.

MILL CHANGES.

THE Luxury Flour Mills, of 949 and 951 North Ninth street, Philadelphia, Pa., have been purchased by the Mechling Bros'. Chemical company, which proposes expending \$200,000 in improving the plant and extending the flour business in connection with the manufacture of chemicals.

THE Salem Manufacturing and Power company, of Troy, N. Y., has just been incorporated with the secretary of state. Its objects are thus set forth: To manufacture chairs, furniture, lumber and woodenware, and to sell the same; and to lease power and mill and deal in grain, flour, feed and plaster. Its capital stock is placed at \$5,000, divided into 100 shares of \$50 each.

INCORPORATIONS.

THE Fulton County Farmers' Milling Co., Ohio, was incorporated and articles filed at Columbus, Ohio, Nov. 18.

NEW MILLING COMPANY.—The Home Milling Company of Wapakoneta, Ohio, was organized and incorporated here Dec. 8th with a capital stock of \$20,000. The officers are as follows: President, F. J. McFarland; vice-president, Alois Bausch; secretary, Charles Kuhn; treasurer, John Connaughton; general manager, Frank McFarland; directors, S. W. McFarland, W. J. Murray, Leon Kahn and Geo. R. Davis.

FIRES.

THE "Sun Grist Mill" at Middleburg, Vt., was destroyed by fire Nov. 22.

JOHN WENGER's flour mill at Halloway, Ont., was burned Nov. 2. Loss, \$22,000.

J. A. LEATHERMAN's mill, Beaver Dam, O., was destroyed by fire Nov. 15. Loss, \$20,000.

ALTON LEAVITT, of Limerick, Me., sustained a \$3,000 loss by the burning of his mill Nov. 20.

THE flour mill of Thos. Williams, Pontiac, Ill., was burned Nov. 17. Loss, \$25,000; no insurance.

A FLOUR shed and dock at Gladstone, Mich., was burned Nov. 29, together with its contents, 10,000 barrels of flour.

THE City Flouring Mills, owned by Joseph Kern, Hicksville, O., were destroyed by fire October 31; loss, \$7,000; aside from this 1,000 bushels of wheat therein.

THE mill of Goins & Gawler at Scio, Ore., burned Nov. 28. Its contents included 500 barrels of flour and a quantity of wheat. Loss, \$25,000. Insurance, \$8,000 on mill. The stock was not insured.

THE flouring mill and grain elevator of McManess & Arnold, Findlay, Ohio, was totally destroyed by fire, November 11th, as were all the contents, including 25,000 bushels of wheat. Loss, \$40,000; insurance, \$12,000.

ON the morning of November 10th the grist-mill of Richardson & Whitmarsh, at Westfield, Pa., was destroyed by fire, together with the barn and sheds adjoining the mill. Nothing was saved from the building. There was an insurance of \$3,000 on the property. Supposed to be incendiary.

THE large four-story steam flouring mill owned by J. A. Leatherman and located at Beaver Dam, six miles north-east of Lima, O., was totally destroyed by fire November 7 together with a large quantity of wheat. The loss will reach \$15,000. There is considerable insurance but the amount cannot be learned. The fire started in the boiler room.

CROPS, STOCKS, ETC.

NEW ORLEANS ships 134,000 bushels of wheat to Europe—100,000 bush. to Rouen and 34,000 bush. to Liverpool; also 15,000 bush. corn to latter.

IMPORTS into United Kingdom during the week ended Nov. 28: Wheat 484,000 qrs.; corn 112,000 qrs.; flour 202,000 brls. For the week ended Nov. 21: Wheat 431,000 qrs.; corn 60,000 qrs.; flour 168,000 barrels.

CALIFORNIA STOCKS OF GRAIN.—The San Francisco produce exchange has prepared its semi-annual statement of the total stocks of wheat and grain in California to Dec. 1. This shows 9,965,000 centals of wheat, against 12,169,000 centals on the same date last year. Barley 2,383,000 centals, as against 1,616,000 centals this same time last year, and flour 140,000 barrels as against 118,000 barrels Dec. 1 last year.

WISCONSIN WHEAT STILL PROFITABLE.—Wm. Godfrey, of Lima, thinks that raising winter wheat in Wisconsin is a paying business. He had twelve acres of that grain last summer, which produced 551½ bushels, or nearly 46 bushels to the acre.

The crop was marketed at the Stone mill in this city at 90 cents a bushel, realizing \$496 13 or \$41.34 per acre. This comes pretty near being net profit, not counting interest and taxes, as the straw is probably worth fully \$5 to the acre. Of course this result was not reached without good, intelligent farming and good land, but the opinion prevails hereabouts that more money has been made in this section the past ten years in raising winter wheat or than spring wheat. In the few cases where it is killed out, the farmer knows it in time to put in other crops and suffers only the loss and labor of the seeding in the fall.—*Whitewater Register*.

FOREIGN CROP SITUATION.

DORNBUSCH reports that during the week ending 23d ult. 84 wheat cargoes passed Constantinople, making a total of 1,646 since January 1, against 1,905 in the corresponding period of last year. Cable advices from Victoria speak more favorable of the crop prospects in that colony.

THE amount of wheat and flour on passage for Great Britain last week decreased 2,728,000 bushels, and for the continent decreased 816,000 bushels, making a total decrease of 3,544,000 bushels afloat, and with a decrease of 1,613,000 bushels in the visible supply, making a total decrease of 5,157,000 bushels on sea and land.

IMPORTS of wheat and flour into Great Britain last week were equivalent of 5,010,000 bushels, and adding farmers' deliveries of native wheat—1,359,000 bushels for the same period—the total addition to supplies was 6,369,000 bushels against a weekly consumption of 4,400,000 bushels, indicating that stocks have increased to the extent of 1,969,000 bushels.

THE *London Daily News* of latest mail date says the Russian prohibitory decrees have shut off 17,000,000 qrs. (136,000,000 bush.) of wheat, rye, barley, corn and oats. "America is thus rendered mistress of the situation, and placed in a position to almost dictate prices." "Europe will be under the necessity of obtaining weekly from the United States during the next four or five months, something like 650,000 qrs. of wheat and flour."

BRIGHT weather, without severe night frosts, has enabled farm work to be again got on with; but the arrears are still serious, and there must be a great deficit in the area sown to winter wheat, says *The London Times*. Still, if the season only continues as it is up to Christmas, there is no reason why a good deal of tillage work and sowing should not be done. The hardening of the wheat market continues, and should be helped by the prohibition of wheat exports from Russia.

CONGRESS OF RUSSIAN MILLERS.—It is reported from St. Petersburg that an invitation will shortly be sent out to all the large millers and flour merchants throughout Russia to a congress to be held early in December. The object of this assembly, says an exchange, "is to consider reports now being prepared by specialists and expert millers who have returned after some months of careful study of milling practice and the flour trade in England, Holland and Belgium. Particular attention will be paid to the question as to the best way of developing the export of Russian flour."

ITALIAN CROPS ARE GOOD.—The Department of Agriculture announces that telegraphic reports from all parts of Italy place the crop of rice for 1891 at 6,740,000 hectolitres, against 6,303,900 in 1890. This completes the reports of the crops for 1891, which may be summarized as follows: Corn, fair; wheat, good; rice, wine and oil, most abundant; and the other minor crops satisfactory. The imports for the ten months ended October 31 were 966,000,000 lire, or 133,000,000 less than for the corresponding period of 1890. The

exports during the same time were 753,000,000 lire, or an increase of 36,000,000. The aggregate of both shows an unfavorable balance of trade to the extent of 208,000,000 lire. But the unfavorable balance during the corresponding period of 1890 was 370,000 lire. The treasury receipts for the first time in many months, show an increase, having been in October 1891, 5,800,000 lire more than in October 1890. But notwithstanding the diminution of the unfavorable balances of trade, the excellent crops and the economies introduced by the ministry, the premium on gold continues to advance.

[From Mark Lane Express.]

BULGARIA has a good wheat harvest, estimated at 39,000,000 bushels, of which 18,000,000 will be available for exportation. The provinces of Roumelia and Albania also have good crops, and the Asiatic provinces of Turkey had a heavy yield, much spoiled, however, by harvest rains.

THE French septennial average of wheat production, including 1891, is returned at the equivalent of 299,202,836 English bushels, and the average yield of rye, which includes meteil, at 79,480,000 bushels. Flood wants are put at 340,000,000 bushels of wheat and 80,000,000 bushels of rye and meteil. This year's crops are given at 232,401,181 bushels of wheat and 71,000,000 of rye and meteil.

THE official returns of the German cereal harvest for 1891 were published on Wednesday, and showed that the autumn sown grain had fared badly almost everywhere, while the spring corn had mostly done well. Wheat for the entire empire is returned at 18 per cent under average, and rye at 20 per cent under average, while barley is 3 per cent over average, and oats 12 per cent over average. The total yield of all cereals in the German empire is about 5 per cent less than usual.

THE liberal exports of Russia and India are said to have discouraged the American holders from a rise, so that red winter wheat and possibly also Californian, may be pressed on sale shortly at a lower price than has hitherto been accepted. This is the opinion now held in America, but the American market varies in its moods from week to week, and almost from day to day. The latest returns in reference to maize indicate a very big yield. This was the tenor of previous advices, but the crop has now been secured and the opinion is largely based on shelling out the grain in the more forward regions. America has thus far escaped the wet autumn from which we are suffering, and the new maize is dryer than usual, so that deliveries are expected to become heavy by about December 1st, instead of the more usual date of the mid-month.

THE imports of rye into the United Kingdom have never amounted to 3,000,000 bushels in a single year, though in 1888 they reached 2,664,534 bushels. The average quantity imported is about 1,500,000 bushels. France imports about 2,000,000 bushels in a year when the home crop is deficient, but in some seasons—1887 for example—her imports and exports practically balance. Austria-Hungary in 1887 imported 3,000,000 bushels of rye, but only 103,608 bushels were imported in the following year. Belgium sometimes imports over 5,000,000 bushels, but 4,000,000 bushels is about the average. Holland's net imports are from 8,000,000 bushels to 12,000,000 bushels, and about 10,000,000 pass through Holland on their way to other countries. Norway, Sweden and Denmark import more rye than they export. Germany's import needs vary very considerably. In 1887 they were about 25,000,000, in 1888 the same, in 1889 they were 47,000,000 bushels. Russia in 1889 exported 51,000,000 bushels while South-eastern Europe from the Danube to the Aegean, exported 13,000,000 bushels.

TRANSPORTATION, FREIGHTS, ETC.

THERE are thirty lines of ocean steamers running out of New York City.

WHAT NEW ORLEANS EXPECTS TO BE.—The papers of New Orleans are prophesying that their port will become the greatest shipping port of the country within the next ten years—greater even than New York. They say that the producers in the northern states west of the Ohio river and in the southern states west of the Alabama river have found out that they can ship grain, cotton and pork to Europe from New Orleans more cheaply than from any other port. A few days ago a committee of the Kansas Millers' association visited New Orleans to make arrangements for exporting Kansas flour to foreign countries by way of that port at the rate of 10,000,000 barrels a year.

ANOTHER GRAIN BLOCKADE.—The Pennsylvania and the Chicago & Grand Trunk on December 7 notified their western connections that they could no longer receive shipments of grain to be recognized at Chicago for eastern points. These were the last of the roads east of Chicago to give such notice, and the movement of grain is checked, as none of the western lines will allow any more of their cars to be taken east. Of course the latter anticipated the action and the majority of them have been preparing for it. The Burlington more than a week ago instructed its western agents to receive no more grain consigned to eastern points unless loaded in cars owned by eastern lines. The result is that 150 Burlington elevators in Nebraska are filled with grain awaiting shipment, and the farmers are clamoring in vain for cars. At St. Louis it is said the situation is the same as at Chicago. Relief is looked for only when the lake and rail shipments are all out of the way, and that will probably not be for five weeks to come.

A PETITION TO MAINTAIN PERMANENT LIGHTS ON THE LAKES.—A petition is to be presented to congress this month, signed by a large number of ship-owners and others in all the lake cities, asking for increased appropriations for the purpose of maintaining lights of a permanent character on the lakes, and a greater number of lighthouses seem to be much needed, and also an increase in the number of light-ships and beacons. The increase of commerce in the last few years has been so large, and the number of vessels now employed and the value of their freight is so great that more attention to this point is really warranted, and it is to be hoped that the petition will be effectual. A government survey and wrecking vessel is also much needed, and should be provided.

RAILWAYS AND TRANSPORTATION.

SAULT STE. MARIE, Mich., Dec. 8.—The work of closing up the canal commenced this morning. At 5 p. m. the upper and lower guard gates were closed. The pumping out of the lock chamber was immediately started. There is no ice in Mud Lake. The weather is mild; wind southwest, light.

DULUTH, Minn., Dec. 8.—The business of the Sault canal for the year that closed yesterday is given below. Two years ago the Sault passed the Suez in amount of business done, and, while this year does not equal 1890, it probably exceeds the Suez canal. The decrease of tonnage for the year is about ½ per cent, but the showing is excellent when the dullness in the ore trade, the fact that vessels did not start out till May 15, and the loss of a week by the blockade after the sinking of the steamer Peck in the Sault river, are considered. The following are the figures of the year and of 1890 in comparison:

Number of passages.....	10,162	10,557
Number of lockages.....	4,956	4,970
Registered tonnage (tons)	8,393,565	8,454,435
Freight tonnage (tons)...	8,884,413	9,041,213
Passengers.....	16,166	24,856

The Sault business for November showed an increase of 223,000 freight tons over November, 1890.

MILWAUKEE NOTES.

THE flour production in Milwaukee during November was 229,250 barrels, against 243,300 in October, 198,200 in November of 1890 and 186,775 in 1889.

THE Milwaukee & Eastern Transit Co., of Milwaukee, and the Cincinnati, Wabash & Michigan railroad are building an elevator at Benton Harbor, Mich., with a capacity of 55,000 bushels.

PRINZ & RAU, manufacturers of separators, smutters, and other milling machinery, report a good trade in their specialties; sufficient to keep their works running full time. Prinz always had the reputation of building a first-class machine.

B. S. POTTER, who formerly operated a flouring mill at Barton, Wis., has about consummated a contract with the Edward P. Allis Co., of this city, for a 125-barrel roller process flouring mill, at West Bend, Wis. This mill will be located on the Milwaukee river a few miles from Barton.

WON'T ALLOW ANY DEDUCTION.—The directors of the Chamber of Commerce, Milwaukee, on the 8th, adopted a resolution "that the board regarded it inexpedient to comply with the petition of millers and other grain buyers to allow any deduction from the actual weight of grain as officially determined by Chamber of Commerce weighers."

MILWAUKEE Milling Machinery, always noted for its superior excellence, is meeting with large sales, and the manufacturers are seemingly doing a very thriving business. Among sales reported the past month are the following:

The Superlative Purifier Mfg. Co., of this city, have orders for New Era Scalpers to be shipped to W. H. Varner, Philipsburg, Pa.; Zemer Bros., Ansonia, O.; W. H. & L. O. Stapp, Blandville, Ky.; A. R. Sprague & Co., Springfield, Mo.; Hummel, Heuke & Co., Dubuque, Ia.; W. K. Wagaman & Co., Pella, Ia.

The sales of flour mill machinery by the E. P. Allis Co. for the past year has approximated \$800,000, while the engine sales during the same time have been over \$2,000,000.

The Superlative Purifier company, of Milwaukee, Wis., have made recent shipments of New Era Scalpers to Carter, Shepherd & Co., Hannibal, Mo., (third order); Pfeffer Milling company, Lebanon, Ill.; C. R. Cooley & Sons, Hartford, Ind.; Gill & Shryock, Meadville, Pa. (two machines); J. Kuhn, Des Moines, Ia.; R. Cottingham, Benton, Wis.; Nordyke & Marmon company, Indianapolis, Ind.; Russell's Roller Mills, Nevada, O.; Portland Milling company, Portland, Ind.; Model Roller Mills, Cohocton, N. Y., and G. H. Baldwin, Urbana, O.

A \$15,000 flour mill contract from Linares, Chili, S. A., has been sent to the E. P. Allis Co., of this city, and also a \$5,000 flour mill contract has been received from Paczua, Mexico.

The Cockle Separator Manufacturing company, of Milwaukee, Wis., have recently shipped Kurth Cockle Separators to W. S. Varner, Philipsburg, Pa.; Eisenmayer Milling company, Springfield, Mo.; Hoyt & Aiken, Chaseburg, Wis.; A. T. Parker, Mason City, Ia.

The Allis Co. are building a 50-barrel roller mill for Loek & Rhode, of Richland, Wis., and they have also been awarded the contract for a 30-barrel steam mill by the United States government, which is to be erected at the Pima Indian Agency at Sacaton, Arizona.

The Cockle Separator Manufacturing company, of this city, have made recent shipments of Morgan Scourers to Hutches, Angel & Co., Morning Sun, Ia.; Hummel, Henker & Co., Dubuque, Ia., and E. Siegmund, Fort Howard, Wis.

RECENT MILLING PATENTS.

The following list of Patents for Milling and Grain Handling Appliances, granted in

MILWAUKEE Business University

Corner Broadway and Mason St. (Hathaway Building.)
Popular Night School. Seven Departments. Day and Evening Sessions.
\$60—LIFE SCHOLARSHIP—\$60
 in either the COMMERCIAL or SHORTHAND department, or six months \$50, payable monthly, if desired. Night school \$5 a month.
D. B. WILLIAMS, President.

November, 1891, is specially reported for the UNITED STATES MILLER by H. G. Underwood, Patent Attorney and Solicitor of Patents, No. 107 Wisconsin Street, Milwaukee, Wis., who will send a copy of any patent named, to any address for 25 cents.

No. 462,560, Rotating Grain Measurer, J. W. Kershaw jr., Burnside, Iowa.

No. 462,372, Mill, Louis Doloire & Charles Golay, Paris, France.

No. 462,680, Grain Meter, E. N. Bachelder & F. E. Lovejoy, Portland Me.

No. 462,810, Screening Machine, Lewis Detar & Louis Munshower, Shelocta, Pa.

No. 463,407, Automatic Grain Weighing Machine, H. P. Parish, New York, N. Y.

No. 463,637, Grain Car Door, D. D. Miles, Aurora, Ill.

No. 463,689, Dust Arrester, H. W. Peterson, Appleton, Wis.

No. 463,988, Grain Meter, C. J. Hartley, Decatur, Ill., assignor of two-thirds to J. K. Warren & B. K. Durfee, same place.

SUNDY ITEMS.

PERRY BRIGHAM is building a feed grist mill at Lewisville, the building being nearly enclosed.

OUR old friends, the Richmond Manufacturing Co., of Lockport, N. Y. still "hang their banner on the outward wall." Their make of special mill machinery cannot be surpassed by any on earth. We speak by the card.

WONDERS will never cease. The present century has been filled with them in the constant progress of science, art and mechanics. Elderly men remember when there were no matches, steel pens, spool cotton or wood screws; when spectacles were considered impertinence hooted out of a theatre; when gas was an outrage on daylight and whale oil, and railroads an insult to common sense and horse flesh. The most astounding of the latter day surprises have been the beautiful gifts of the unknown, but most prolific force we call electricity. One of the most delightful of the minor accessories it furnishes to the household is the newly invented "Electric Lighter". Manufactured and sold by the Barr Electric Manufacturing Co., Broadway, New York. See their ad. on other page.

A stock company, with a capital of \$25,000, will be organized at Carlton, Outagamie county, Wis., to be known as the Carlton Flouring Mill Company.

THE flour mill of Martin L. Dunn, near Bordentown, N. J., has been idle for a few days, the big turbine wheel refusing to move. An examination found the wheel choked with eels. Nearly a bushel of them had to be cut out with a chisel and hammer.

THE longest shaft in the world in one piece, or in any number of pieces, is in the Washington navy yard, Washington, D. C. It is 3½ inches square, 460 feet long, and transmits power to traveling cranes. It runs at 160 revolutions per minute.

ALUMINIUM has been substituted for cast iron in the specifications for the dome of the tower of Philadelphia's new City Hall. It will save the constant expense of painting and reduce the weight of the tower about 400 tons.

ON Nov. 10th, the Waters-Pierce Oil Company, St. Louis, the local representative of the Standard Oil Company, made its thirty-fifth reduction in the price of oil since in 1888 it inaugurated a fight against the International Oil Company of this city. Since the beginning of the fight the price of oil in St. Louis has been reduced 6½ cents a gallon. The International Oil Company announces it will meet this cut of the Standard Com-

pany's representatives and the fight will continue.

THE ERIE ROAD WITHDRAWS.—The Erie Railroad, Dec. 8, served formal notice on the Trunk Line Association that they had withdrawn from their agreement made last spring, and will on the 10th instant resume their former relation with the Chicago & Alton Railroad, selling tickets and checking baggage over that road.

A BANK TELLER INSOLVENT.—Frank Savage, of Lee, Mass., is a petitioner in insolvency. Mr. Savage recently sold out his laundry business in which he had met many reverses. He lost heavily in his Holyoke laundry business, through an untrustworthy partner. He is a trusted official at the National bank, where he has held the position of teller for many years. His creditors are mostly in Lee, with sums from \$5 to \$1,000, although Holyoke and Springfield creditors also have claims.

DELEGATES TO THE WATERWAYS MEETING.—Gov. Merriam, Dec. 8, appointed the following delegates to the Deep Waterways Convention which is to be held in Detroit on Dec. 17: J. J. Hill, St. Paul; C. A. Pillsbury, Minneapolis; Gen. S. B. Jennison Red Wing; F. B. Dougherty, Duluth, Minn.; and Earl Youmans, Winona.

FARMERS' CO-OPERATIVE FLOUR MILL.—About fifty members of the Farmers, Mutual Benefit Association assembled at a called meeting in Muncie, Ind., Nov. 28. One of the objects was to hear a report from the delegates to the National Assembly in Indianapolis recently. But the main object was to canvas the matter of establishing in this county a co-operative milling system. The plan that was adopted is to organize a stock company of \$20,000, the stock to be taken by the farmers throughout the country, and buy or build a mill and large warehouse in this city, to be operated on the co-operative plan. The members will use the immense warehouse to store their grain in until the markets are favorable for its disposal to the best advantage. The scheme is being considered by most of the organizations in the great wheat state of Indiana.

MANY millers will read with real interest the condition of affairs in the Millers' National Insurance Company, which we reprint from the "United States Miller." It seems almost incredible that a number of intelligent millers would allow the affairs of their company to fall into the sole charge of any one official, however competent he might be to manage all its affairs, including proprietary and deliberative functions with the purely clerical functions of a secretary. This particular company seems to have upset all former ideas of the management of business concerns. Millers will do well to study the career of such an organization.—*Milling World.*

RAINSTORM IN THE NORTHWEST.—At St. Paul, Minn., a warm rain has been falling heavily since the middle of the afternoon of December 13th and from reports received the storm seems to be general in Minnesota and extending over into South Dakota. The unseasonable snow of last month had disappeared several days ago and this rain is being rapidly absorbed. In South Dakota there is more moisture in the ground than has been known before at the same season.

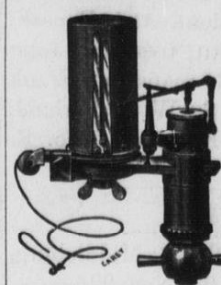
HARD METAL IN SOFT DRINKS.—During the last quarter the Aberdeen public analyst examined thirty-one samples of aerated beverages and only ten were found to be pure. One quantity of lemonade

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contained as much as 4.3 grains per gallon of lead, another 2.25 a third 2.25 and a fourth 1.2 grains, while the others contained .90 to .04 grain per gallon. Two samples contained heavy traces of iron, but this impurity is decidedly less objectionable than the other. No wonder lemonade is sometimes contemptuously described as "liquid stomach-ache."

INSURANCE GOSSIP.

[From the Commercial Advertiser, New York.]

Quite a number of companies are bidding for the reinsurance of the Neptune of Boston, whose affairs we discussed last week. The directors met last week and discussed the reinsurance question.

The Prudential, of Boston, has not reinsured, but Secretary Hill has the matter in charge, and ere long may get an offer worth taking. Whoever gets Hill will get a good man.

The Packers' and Provision Dealers' Insurance Company, of Chicago, had only about \$15,000 net surplus on January 1. It has been quite a free winter. Will its forthcoming statement be interesting?

The name of the gobbler of the Union of Louisville will be announced in a few days.

The Enterprise, of Cincinnati, will probably be reinsured by one of the prominent English companies, according to Cincinnati men.

WANT THEIR INSURANCE.—TOLEDO, O., Dec. 2.—In Judge Pugsley's court the case of Chas. W. Pelsue et al vs. J. P. Childs et al, is on trial. The plaintiffs were the owners of a flouring mill at Centralia, Mo., which was destroyed by fire. They had an insurance in the Seneca County Mutual Insurance company, and this suit is for the purpose of enforcing its payment.

FLORIDA AND THE SUNNY SOUTH VIA

THE BIG FOUR ROUTE.

To all persons contemplating a southern trip the Big Four Route offers special attractions and advantages possessed by no other line. Solid Vestibuled trains, heated with steam and equipped with palace sleeping cars, reclining chair cars and elegant parlor café dining cars run daily, making connection in Central Union Station, Cincinnati, with through express trains of the Queen & Crescent Route, Louisville & Nashville, Kentucky Central and Chesapeake & Ohio Railways, avoiding the tedious transfer necessary via other lines, and affording practically through train service to Old Point Comfort, Asheville, Chattanooga, New Orleans, Savannah, Jacksonville, St. Augustine, Tampa, Indian River and all winter resorts of the South. Tourist tickets via the Popular Big Four Route at special low rates are on sale at all coupon ticket offices throughout the country. Ask the agent for tickets via the Big Four Route. D. B. MARTIN, General Passenger and Ticket Agent, Cincinnati, O.

LEGAL NOTES.

CONSTRUCTION OF OPEN CONTRACT.—Under a contract by which it is agreed to sell a specific amount of goods at a certain price, "and as much more as may be ordered at the same price," after nearly twice the amount specified has been sold, no action can be maintained for a failure to furnish more goods at the same price.—*Bryant v. Smith*, Supreme Court of Michigan, 49 N. W. Rep. 889.

PURCHASE OF GOODS BY SAMPLE.—Where the purchaser of merchandise or produce by sample, after refusing to accept on the ground that it was not up to sample, agrees to accept it without any new arrangement as to price, he becomes liable for the contract price, and, if he afterwards fails to accept, and the seller sells at auction, he is liable to the seller for the difference between the contract price and the price realized at such sale, together with costs of storage and other expenses necessitated by his failure to accept.—*Woods v. Cramer*, Supreme Court of South Carolina, 13 S. E. Rep. 660.

SHIPMENT OF GOODS OVER CONNECTING LINES.—In pursuance of an inquiry from a shipper, a railroad company informed him of the through rates of transportation of certain goods to a point beyond its own line. The goods were subsequently delivered to the company, and received by it addressed to such point, which the company could reach by means of connecting railroads. These facts were sufficient to sustain a finding that the company had agreed to transport the goods beyond its own line to the place to which they were consigned. The carrier, which had entered into a contract with the shipper for the transportation of the goods to the place of destination, had no right to make inconsistent stipulations with the persons who afterwards delivered the goods for the shipper. A provision in the shipping bills that the carrier should not be responsible for delay in the transit of the property does not relieve it from liability for delay occasioned by its own negligence.—*Jennings v. Grand Trunk Railway of Canada*, Court of Appeals of New York, 28 N. E. Rep. 394.

FIXING PRICES BY POOL COMBINATION.—Where goods are bought without a stipulation as to their price, a price fixed by all the managers of the goods of that kind, who have combined for the purpose of fixing and maintaining the price, cannot be considered the market price. A market price is that which is regulated by the laws of trade, and competition is one of the main forces operating on the result. In such a case the reasonable worth and value of the goods may be recovered.—*Lovejoy v. Nichols*, Supreme Court of Michigan, 49 N. W. Rep. 901.

DEFECTIVE CONDITION OF RAILROAD YARD.—Where a railroad company sets apart a portion of its yards for the delivery and reception of freight directly from the teams of shippers, it thereby invites them to drive upon its premises, and it is liable to them for any damages they may sustain by reason of obstructions or excavations in that portion of the yard so set apart and which were not properly guarded.—*Chicago & I. C. Railway Co. v. De Boum*, Appellate Court of Indiana, 28 N. E. Rep. 447.

INFRINGEMENT OF TRADEMARK.—The use of a trademark different from that of another person but arranged so as to resemble it, with intent to imitate it closely enough to mislead casual observers is an infringement. One trademark was the letters G. F. while the other was G. & F. with the sign & as large as the letters as registered. In this however, the second parties printed the sign & very small, so as to resemble the other. This was an infringement.—*Garon v. Gartner*, Circuit Court of the United States, Southern District of New York, 47 Fed. Rep. 465.

LEGAL ASPECTS OF OPTION CONTRACTS.—Contracts for the sale and delivery of grain or other commodities, to be delivered at a

future day are not of themselves unlawful where the parties in good faith intend to perform them according to their terms. But contracts in form for future delivery, not intended to represent actual transactions, but merely to pay and receive the difference between the agreed price and the market price at a future day, are in the nature of wagers on the future price of the commodity, and void. The burden of establishing the illegality of such transactions rests upon the party who asserts it. The form or language of the contract is not material, but inquiry may be made into the facts and circumstances attending or connected with it, in order to determine its real character. The law will not enforce a contract in favor of a party who has entered into it for an unlawful purpose. A broker or commission merchant who makes advances for his principal and aids him in "operating in futures," with notice of the unlawful intent of the latter and of the real character of the transactions, cannot recover his commissions and advances; and in order to show that he is cognizant of the illegality, evidence may be received on the trial, and considered by the jury, showing the nature of the transactions, the relations of the parties, the course of dealing between them, the occupation and financial ability of the principal, and other material facts tending to prove notice. In the absence of proof of the statutes of another State the common-law rule will be applied in determining the legality of contracts made in that State.—*Mohe v. Miesen*, Supreme Court of Minnesota, 49 N. W. Rep. 862.

ENDORSEMENT "WITHOUT RECOURSES."—The contract of a person who endorses a note "without recourses" is, that the signatures of the persons on the note before him are the genuine signatures of the persons whose signatures they purport to be, and that such note is their valid obligation. An endorsement "without recourses" relieves the endorser of all responsibility for the performance of their obligations by the other parties to the note—it is merely a guaranty of the genuineness of the note itself.—*Palmer v. Courtney*, Supreme Court of Nebraska, 49 N. W. Rep. 754.

COMPENSATION OF MANAGING PARTNER.—Where one of two partners was employed by a third person on a salary, which he did not put into the partnership business, the other who devoted his whole services to the joint business, is entitled to pay for such services without any agreement therefor. Such services cannot be said to be valueless because of his neglect to properly keep the firm books, when it was equally the duty of the other partner to look after the books.—*Morris v. Griffin*, Supreme Court of Iowa, 49 N. W. Rep. 846.

RATIFICATION OF UNAUTHORIZED ACTS OF AGENT.—Where an agent secures for his principal the notes of others upon certain conditions and stipulations, although he may have had no authority to make them, the principal is bound to them by the acceptance of the notes. If the principal accepts the fruit of his agent's efforts, he must at the same time accept their consequences.—*Wheeler & Wilson Manufg. Co. v. Aughey*, Supreme Court of Pennsylvania, 22 At. Rep. 667.

EVIDENCE OF PARTNERSHIP.—An existing partnership was dissolved, and the business which had been conducted by it was continued under the name of the senior partner of the old firm with the addition of "& Co." It was generally understood in the community that an employee of the former firm represented the "Co.", and he knew that such was the general assumption. He never denied that he was a partner, admitted specifically that he was, and consented to the publication of a statement in a local newspaper that he was a partner. This not only precluded him from denying that he was a partner, but is sufficient to warrant a jury in finding as a matter of fact that he was.—*Wright v. Weameister*, Supreme Court of Michigan, 42 N. W. Rep. 870.

RECIPROCITY WITH SPAIN.

As an evidence of the benefits that have already been realized from the operations of the Spanish reciprocity treaty which went into effect only two months ago, the following statement has been received at the state department. It shows the increase of shipments made by the Ward line steamers from New York to Havana for the months of September and October last as compared with those made during the corresponding months in 1890:

Potatoes, bbls.	26,934	56,397
Lard, tierces.	11,533	15,845
Lard, firkins.	591	1,265
Lard, cases.	980	9,793
Lard, hhds.	229	228
Bacon, cases.	510	1,263
Hams, tes.	1,322	1,655
Hams, bbls.	118	161
Hams, crates.	65	57
Herrings, boxes.	1,080	13,353
Onions, bbls.	143	1,333
Cabbage, crates.	1,222	405
Beans, bbls.	298	3,576
Beans, bags.	363	298
Hay, bales.	150	791
Pears, bbls.	150	224
Oats, bags.	416	1,694
Bran, bags.	207	864
Peas, dry, bbls.	207	922
Pork, bbls.	768	363
Grapes, bbls.		100
Apples, bbls.		7,590

The steamship company reports that since the treaty went into effect they have had to charter three extra steamers besides their regular sailings and that every ship without exception has gone out full. The shipments of machinery for the manufacture of sugar have been greater than ever known before. They report that the leading provision merchant in Havana estimates that when the treaty provision as to reduction of duty on flour takes place January 1 next, the imports from the United States to Cuba will reach 1,000,000 barrels per annum or more than double the present total consumption. Judging from present indications the company anticipates that when the treaty is fully in force they will have to increase the number of their sailing or largely increase the capacity of their ships.

RESULTS OF RECIPROCITY.—The *South American Journal* of London says: "The business results of the reciprocity measures of Mr. Blaine are already discernable in the trade of the United States. Even English companies operating in Brazil are now purchasing their supplies largely in the United States to secure the benefit of the reduction of 25 per cent in duties."

NEWS OF THE DAY.

A LEVEL-HEADED FARMER.

[From Milwaukee Sentinel.]

AT the Farmers' Institute held at Plainfield, in December, Chas. R. Beach of Whitewater, a leading Walworth County farmer, made a telling argument against the practice of a large class of farmers who are called grumblers with their own business, and who claim that the laboring man, including the farmer, is a constant sufferer from the aggression of capital. P. C. Goodrich, of Fort Atkinson, the leading dairyman of the North-west, had related his experience with his herd of cows for 1890. He said his cows produced an average of 320 pounds of butter each, which cost him 13 cents a pound to produce. He had charged the cows the market price for all they consumed, interest on all the capital invested in stock and farm, and for all labor done. The result showed a net profit above all cost, of over \$53 per cow. Mr. Beach took these facts for a text and said:

"Mr. Goodrich tells us that he got over \$1,000 from his herd of 20 cows, besides interest on capital invested, good pay for his labor and the market price for all the food they consumed. Does that money belong to Mr. Goodrich? He tells he did not earn it. He received lawful usury and pay for his labor aside from that. Has he a right to keep it? or is it his duty to turn it over into a general fund for the benefit of that class of poor farmers who, through a lack of skill and a knowledge of their business, are unable to make a profit on their investments and

pay for their labor? By that accomplishment Mr. Goodrich has removed himself from the farmer class, in the generally accepted term, and has placed himself with that class commonly called robbers of labor and of the people. He has joined Vanderbilt, Gould, Phil. Armour and the railroad corporations of the country. He has made over 100 per cent profit and has put in his pocket that which he has not earned. He has reaped the fruit of his acquired skill and of wisdom applied to the management of his business. That is exactly what the great corporations and capitalists of the country are doing. Mr. Goodrich has applied to his business that skill which has enabled him to increase his production far beyond the average, and at the same time proportionately decrease the cost of his product. The railroad corporations of the country are applying that skill to their business which enables them to do the transportation of the country on a basis which both decreases the cost and increases their carrying capacity, thus enabling them in some

tances to make a profit amounting to more than legitimate usury on their capital invested. "There is a class of persons in this country who tell us the farmers of the country are all going to the devil—if they haven't already got there. They tell us the corporations and monopolies are robbing the people, and some go so far as to say they ought to be compelled to turn into a general fund for distribution among the people all of their profits, above a certain per centage. If that is good doctrine as applied to corporations and capitalists, why not apply it to Goodrich the farmer? He has made over 100 per cent profit on his capital, while the statistics prove that the railroads of the country don't make 7 per cent. Will any man stand up and tell us that Mr. Goodrich's \$53 profit on each cow in his herd does not rightfully belong to him? I tell you it does belong to him, and no just law under heaven could take it from him to disburse as a premium on slothfulness. You will all agree with me on that point, and the principle which applies to Mr. Goodrich applies also to every other man or combination of men."

"We pray 'Thy kingdom come,' but the Great Teacher tells us the kingdom of heaven is like a man who was going into a foreign country, and calling his servants about him, gave them various sums of money, commanding each to invest and use it for his benefit until he should return. When he returned those who had so used the funds placed in their hands as to make a profit were commended and given more, but he who had not made judicious use of his portion was condemned to the loss of the original sum. Was the depriving of that man of his money an arbitrary act? or was it in accordance with the law of the universe? If there is any trouble with the farmer, isn't this key to it? If we all labor to acquire knowledge of our business and wisdom in the application of that knowledge or skill, and then do the best we can, we can all do as well as Mr. Goodrich has done, and he, a farmer, has proved that he is able to make a better profit on his capital invested than any capitalist in the country can make on his investment. Neither Phil. Armour nor the railroads can show such profits on their capital and labor as he. The point to solve in the financial question is not a division of acquired wealth, but in putting skill into your business and getting pay for it. Mr. Goodrich put skill into his business and it yielded him a hundred fold, and more. It is he who fails to put skill into his business who fails to reap a profit. Mr. Goodrich has not got a dollar of my money, nor of yours; neither has Phil. Armour nor the railroads. They have simply solved the problem of putting skill into their business and getting a profit out of it, and every farmer of Wisconsin can do as well if he will work as hard as they do, put skill into his business and conduct it wisely. Mr. Goodrich has not a superior dairy farm, nor the best herd of cows in the country, but he has got the best knowledge of his business that it has been possible for him to obtain."

OHIO MILLERS.

Meeting of the Northeastern Ohio Association in Akron—F. Schumacher Elected President.

A MEETING of the millers of Northeastern Ohio Millers' Association was held in the parlors of the Windsor hotel, Akron, Ohio, Dec. 4th. The state has for several years been divided into district associations, all under the control of the State Association, and this is the yearly meeting of the above named association.

Frank Griffith, of the Orrville Milling Company, called the meeting to order in the absence of the regular president, Mayor Blake, of Canton. A number of matters were discussed, but of minor importance. The question of buying sacks produced general discussion, but nothing definite was decided upon. Reports showed that wheat was not going into the Winter in so good condition as last year, and that stocks still back in farmers' hands were about the same as last year. Owing to delay in trains the meeting was not called to order until late.

Among the millers in attendance were the following gentlemen:

L. C. Miles, F. Schumacher, F. A. Schumacher, Akron; W. D. Tyler, Wooster; E. F. Shelley, Loudonville; T. A. Parry, Lucas; Jacob Schmidt, Loudonville, O.; W. A. Craig, Shreve; J. B. Thompson, Gann; B. B. Swartz, Danville; W. H. Hecker, Millersburg; J. S. R. Overholz, Wooster; J. L. Van Hatter, Canton; Morgan Machauser, Hartville; Howard Clingston, Ashland; K. Plank, Galion; S. B. Leiter, Mansfield; B. A. Paxton, Ashland; J. T. Pierce, Nankin; Allen Greely, West Salem; J. P. Smith, Polk; Geo. H. Hay, Creston; J. W. Southern, Wadsworth; W. Salem, West Salem; R. J. Cochrane, Burbank; A. L. Clapp, Lodi; C. A. Williams, Kent; J. M. Waugh, Mansfield; C. N. Corley, Alliance; W. Rudeth and Alf. Slutts, Fredericksburg; W. H. Reinbocht, Marshallville; M. M. Rollins, Youngstown; D. F. Griffith, Orrville; J. A. Dyer, Creston; M. H. Howe, Cuyahoga Falls; J. A. Neggle, Lodi.

One of the principal objects of the meeting was a complete reorganization of the association which for some time past has not shown that vitality supposed to be consistent with the aims of the organization. With this end in view a new constitution and by-laws were adopted and arrangements made to get every miller in Northeastern Ohio into sympathy with the work being done.

F. A. Schumacher, of the American Cereal Company, of Akron, O., was elected president of the association. Frank Griffiths, of the Orrville Milling Company, was elected secretary and treasurer. The association then adjourned to meet for its quarterly session on Jan. 23, 1892. While the place was not decided it will probably be Akron which is almost the center of the territory under the control of the association.

VARIETY.

THE rent of land in England 300 years ago was about one shilling per acre.

THE yearly income of the Church of England is nearly £10,500,000 sterling.

THE latest estimate of Russia's population places the number at 110,000,000.

A WATER famine has made New York realize that water is some good, after all.

THERE are 18,000,000 farmers in France, the total population of the country being 38,000,000.

OFFICIAL statistics show that Colorado has over 20,000 square miles of coal, and the product in 1890 was about 3,000,000 tons.

THE proportion of travelers killed in railroad accidents in the different countries is as follows: In France, one to every 24,000,000; England, one to every 21,000,000; Germany, one to every 9,000,000; Belgium, one to every 6,830,000; United States, one to every 2,800,000.

A USEFUL invention, tending to lessen the possibility of accidents in factories, is now being extensively adopted in England. The breaking of a glass, which is adjusted against the wall of every room in the mill, will at once stop the engine, an electric current being established between the room and the throttle valve of the engine, shutting off the steam in an instant. By this means the engine was stopped at one of the mills recently in a few seconds, and a young girl, whose clothes had become entangled in an upright shaft, was released uninjured.

A CASE decided a few days ago in New York upsets some ideas long entertained as regards deadhead travelers. Hitherto the general rule has been that one traveling on a pass could not recover damages in case of an accident, but that idea has been now set aside and damages awarded. It is rather rough on the companies to get nothing for the transportation, and then be liable to the individual whenever a crash shall come; but, on the other hand, many a holder of a pass will lie back and find an added charm thrown around his journey.

A NEW USE FOR ALUMINUM.—According to a Pittsburgh dispatch, an order for five hundred tons of aluminum has been placed with the Pittsburgh Reduction company, to be used for the equipments of the German army. Capt. Hunt, of the Pittsburgh company, is reported as saying: "The emperor desires the canteens of his soldiers to be made of aluminum. There are two reasons for this, namely: its lightness and cleanliness. It will be used also for buckles, and it may be brought into use in the manufacture of cartridge shells. The new smokeless powder cartridges have brought about a demand for aluminum, and other European powers are also considering the advisability of using it."

THE LARGEST FRESH WATER STEAMSHIP.—The keel of the largest steamer on fresh water in the world will soon be laid in the ship yard of the Chicago Shipbuilding company in South Chicago. She will be 330 feet keel, 350 feet over all, 43 feet beam and 24½ feet deep, and will carry on the ordinary stage of water in the lake canals over 4,000 tons. With an increase of depth of water on the Great Lakes, as now contemplated, the new boat will carry without trouble over \$5,000 tons. She will be built for the Minnesota Steamship company, for which the two steel steamers constructed last winter at the Chicago shipyard were also built. A sister boat of exactly the same dimensions will be built at the same time at the Globe Iron works, in Cleveland. Both steamers will be given power to drive them 14 miles an hour. They have triple expansion engines, 24, 39, 63 inches by 48-inch stroke, and will be fed by three 12x12 feet boilers. They will be ready for service at the opening of navigation next year.—*Iron Trade Review*.

MECHANICAL.

IRON has been rolled to the thinness of 1-1800 of an inch. This excessive tenuity will be understood when it is considered that the thinnest tissue paper measures 1-1200 of an inch.

BOILER SCALE IS EXPENSIVE.—Experiments made 20 years ago on the non-conducting properties of boiler scale gave astonishing results. The effect of the scale accumulation is given as follows: 1/16 inch thick requires 15 per cent more fuel; 1/8 inch 60 per cent more fuel, and 1/4 inch thick 150 per cent more. To produce steam at 90 pounds pressure, in a clean boiler, only 325 degrees of heat are required, but with heavy scale this temperature must be increased 200 to 300 degrees. For 1/4 inch of scale the heat must be 700 degrees, or almost a low red heat for the iron.

CEMENT FOR IRON.—The following is given as a mixture for joining pieces of iron together: Equal parts of sulphur and white lead, with about one-sixth por-

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For Parlor, Dining Room or Chamber.



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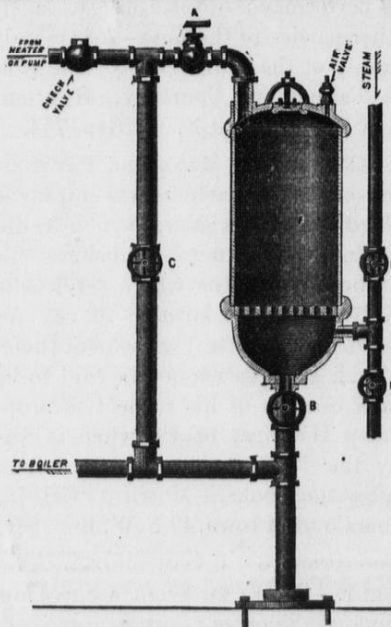
ELECTRICITY GENERATED BY CHEMICAL ACTION. . . .
A HANDSOME ORNAMENT FOR TABLE, MANTEL OR COUNTER.

NICKEL PLATED. OCCUPIES SIX SQUARE INCHES.
A CHILD CAN OPERATE IT.

PRICE, \$5.00. Liberal Discount to the Trade and Agents.

BARR ELECTRIC MFG. CO. 17 and 19 BROADWAY, NEW YORK

This Battery can also be used for Medical Coil, etc.



Trowbridge Boiler Cleaner

USING NO CHEMICALS.

THIS Cleaner has been for five years past subjected to the most severe and varied tests with artesian well and all other waters impregnated with every known element of incrustation, from the Lakes to the Gulf and on the Pacific Coast. It has never failed to answer in every case the demand made upon it. Having thoroughly proven its entire efficacy, we offer it to the steam-using world, confident that it is the best and only sure apparatus and method for removal and prevention of scale in Pipes and Boilers, using no Chemicals.

SEND FOR TESTIMONIALS.

SEAMANS & WHITNEY, Agents,
84 New Insurance Building,
MILWAUKEE, WIS.

portion of borax, are the constituents of the mixture, and the three should be thoroughly incorporated together so as to form one homogeneous mass. When the composition is to be applied it should be wetted with strong sulphuric acid, and a thin layer of it placed between the two pieces of iron to be connected, these being at once pressed together. The *Chemical Trades Journal* says: "It is stated that the cement will hold so firmly as to resist the blows of a steam hammer, and dry so completely in a few days as to leave no trace of the cement, the work then presenting the appearance of welding."

THE Yorkshire Boiler Insurance Company of Bradford, Eng., send us a copy of Mr. John Waugh's report on the explosion of an upright boiler at Huddersfield, Eng., on June 3, 1891. The boiler was internally fired, and a hammer test was applied to it (not by the Yorkshire company, however), on June 2d, the day before the explosion. Next day, the fire box collapsed, killing one man and injuring several others. The rupture revealed the fact that for a distance of six

to eighteen inches from the bottom of the fire box, corrosion had eaten the plate away round the whole circumference of the boiler; in some places, about 13 or 14 inches from the bottom, to the thickness of 1/16, the original thickness being 7/16 of an inch. This explosion is an excellent illustration of a very important fact, which is, that the hammer test, to be of value, must be applied by a man who has had long experience in such work. A novice might pass over a very dangerous spot with the hammer, and not detect it; while, on the other hand, we have seen experienced inspectors detect flaws with the hammer where the novice could perceive no difference in the sound. We do not recommend the hammer as a substitute for thorough internal and external examination, but it is very valuable when applied by an experienced person, on boilers that cannot be thoroughly examined in any other way, either on account of their design or their small size; and we believe in applying it on every occasion, in addition to the regular internal examination.—*The Locomotive*.

DEALERS.

H. R. STROEMER,
Grain and Provision Broker,
MACON, GA.

CORRESPONDENCE SOLICITED. Reference, Exchange Bank, or any other bank in Macon.

F. O. TREPAGNIER. Established 1844. EDWARD BRES.

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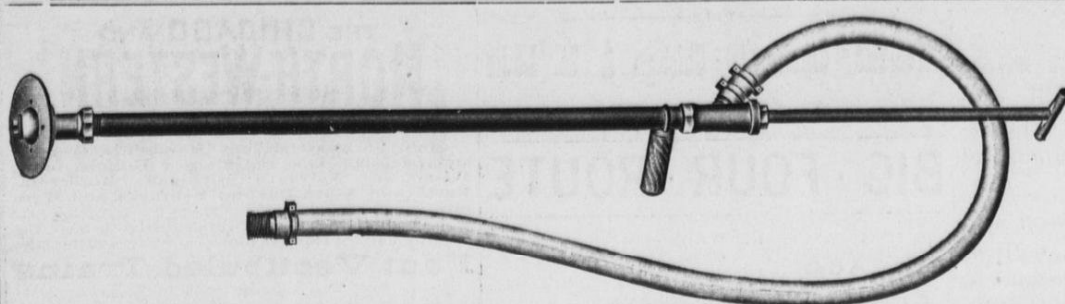
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1892.
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1892.
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AN ILLUSTRATED WEEKLY.

The Thirteenth Volume of Harper's Young People began on November 3, 1891. For the coming year this best and most comprehensive weekly in the world for youthful readers offers a varied and fascinating programme. In serial fiction it will contain "Diego Pinzon," a story of the first voyage of Columbus, by John R. Coryell; "Canoemates: A Story of the Florida Reefs and Everglades," by Kirk Munroe; another story by one of the best known and most popular of American authors; and stories in three and four parts by Thomas Nelson Page, E. H. House, Angeline Teal, Ella Rodman Church, and Mary S. McCobb. More than two hundred short stories by favorite writers, articles on travel, out-of-door sports, in-door games, and all subjects dear to the hearts of the young, besides hundreds of illustrations by leading artists, will combine to make Harper's Young People for 1892 an irresistible repository of pleasure and information for boys and girls.

"The best weekly publication for young people in existence. It is edited with scrupulous care and attention, and instruction and entertainment are mingled in its pages in just the right proportions to captivate the minds of the young, and at the same time to develop their thinking power."—Observer, N. Y.

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Volumes V., VIII., and XII., of Harper's Young People, bound in cloth, will be sent by mail, postage paid, on receipt of \$3.50 each. The other volumes are out of print.
Single Number, Five Cents each. Specimen Copy sent on receipt of two-cent stamp.
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Scribner's Magazine.

AN EXCEPTIONAL YEAR.
The year 1891 has been marked by a greater advance than any similar period since the Magazine was established. Not only has the literary and artistic excellence been maintained and increased, but a corresponding gain has been made in the sale and influence of the Magazine. At the end of 1891 the circulation has risen to more than 140,000. It may justly be promised that the further improvements for the coming year will be proportionate to these largely increased opportunities.

FOR NEXT YEAR.
It is not possible to give, in a brief space, an account of all the features in preparation, but the material is deficient in neither importance nor range of subject. Among the subjects treated:

The Poor in the World's Great Cities.
It is proposed to publish a series of articles, upon a scale not before attempted, giving the results of special study and work among the poor of the great cities. The plan will include an account of the condition of life in those cities (in many lands) where the results of research will be helpful for purposes of comparison as well as for their own intrinsic interest. While, from a scientific point of view, the articles will be a contribution of great importance, the treatment will be thoroughly popular, and the elaborate illustrations will serve to make the presentation of the subject vivid as well as picturesque.

WASHINGTON ALLSTON.
Unpublished Reminiscences and Letters of the foremost among early American painters. A number of illustrations will lend additional interest to the articles.

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The aim of this series of very short articles is to describe the signal occasions when some decisive event took place, or when some great experiment was first shown to be successful—such moments as that of the first use of the Atlantic cable, the first use of the telegraph and the telephone, the first successful experiment with ether, the night of the Chicago fire, the scene at the moment of the vote on the impeachment of Andrew Johnson, etc., etc.

OUT OF DOOR PAPERS.
In the early spring will be begun a number of seasonable articles, among them being:
Small Country Places, how to lay out and beautify them, by Samuel Parsons, Jr.
Fishing Lore from an Angler's Note-Book, by Dr. Leroy M. Yale.
Mountain Station Life in New Zealand, by Sidney Dickinson.

Racing in Australia, by Sidney Dickinson, with illustrations by Birge Harrison.
The illustrations are made from original material. A full prospectus appears in the Holiday Number, now ready.

PRICE, 25 CENTS. \$3.00 A YEAR.
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Whether you intend to visit the World's Fair in Chicago in 1893 or not you will want a history of it from the beginning. Such a history is being magnificently presented by

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Printed in English, German, French and Spanish.

The first number of this great quarterly edition of The Graphic, just issued, contains Views of all the Principal Buildings from official designs (the Administration, Fine Arts, Manufactures, Fisheries, Mines and Mining, Agricultural Buildings and everything else to date). Portraits of the Principal Officers of the Commission and Directory. Views of the Principal Cities of America, full-page Portraits of President Harrison and Secretary Blaine, and a superb triple-page Bird's-Eye View of the Exposition Grounds and Buildings from designs by the Bureau of Construction.

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Make remittances under clubbing rates to this office.

LITERARY NOTES.

THE next number of *Harper's Weekly*, published December 16th, will contain a four-page map, giving a bird's-eye view of the exposition grounds and buildings at Chicago.

COLONEL THOMAS W. HIGGINSON will contribute a charming paper, entitled "The Lilliputian Theory of Woman," to the forthcoming number of *Harper's Bazar*.

It is safe to predict, if not a long "run," at least a large number of productions on the amateur stage, for "Bobby Shaftoe," the comic operetta by H. C. Bunner, published in the Christmas number of *Harper's Young People*.

Out with his *Own Diamond*, a novel by Paul Cushing, author of *The Blacksmith of Voe*, will be the next volume in "Harper's Franklin Square Library." It will be published about the 15th of December.

WONDERFUL NIGHTS IN OLD EGYPT.—Nights there were, too, full of enchantment—such nights as Cleopatra once outwatched on some wave-washed Alexandrian terrace—when the moon, burning with a white fire unknown to the North, hung over her own perfect image in the water; or when the sky, "clad in the beauty of a thousand stars," was mirrored in the still river below, and we seemed to float through a starry world. In the crystal-clear air the great constellations flamed with unwonted splendor; above, Orion blazed; the Hyades and Pleiades glittered like diamond fibulae in night's dark cloth; Canopus's great lamp burned with a mellow light; Berenice's shining locks hung on the vault like a votive offering; Cassiopeia queened it in her silver chair, while Gemini's twin beacons flared and paled.

Under such a sky, from the terraces of the Alexandrian Museum, King Ptolemy's astronomers watched these gleaming worlds in their ordered march through space, seeing in each planet a divine chorister in the infinite symphony, and hearing faintly the prelude of the celestial harmony centuries before it thundered in Galileo's ears as he stood at midnight on the brown Tuscan tower among the olives.

Most precious of all these experiences is the remembrance of the hours spent on deck at what the Arabs call "the time of evening prayer," when the sun dipped behind the Libyan chain, and Mustapha's fire rose in pale yellow flame against the violet water. The mountaintops still glowed, the desert was ashes of roses, the high bank turned to bitumen, the sky to molten gold, and darkly silhouetted against its splendor, a frieze of living bronze against a golden wall, the ever-charming figures of the Egyptian pastoral—Canephore, on their stately march; Chloe, lithe and slender, driving home her sheep; Daphnis herding his goats; the gleaners of Virgil; the husbandmen of Anacreon, passed before us in the glamour of the evening light; every low-browed profile outlined in sharpest relief against the glowing west.—From "Afloat on the Nile," by E. H. and E. W. Blashfield, in December (Christmas) *Scribner*.

The *Breeders' Gazette*, published by J. H. Sanders Publishing Co., of Chicago, has now in preparation a fine Christmas edition, which will be prized by our many readers interested in live stock or farming. Price for Christmas number, 25 cents; regular subscription, \$2 per annum; with U. S. MILLER, one year, \$2.50.

"CATALOGUE of Farm Lands, Coal Lands, Iron Lands, Timber Lands, Improved Farms with full description, price and terms, of properties for sale on the line of Queen & Crescent Route." The above is the title page of a very neatly gotten up catalogue, of sixty pages, which is being mailed free to all persons who will make application to Mr. D. G. Edwards, the General Passenger Agent at Cincinnati, O.

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Harper's Young People, monthly, and U. S. Miller and Milling Engineer, - - -	2.50
Century, monthly, and United States Miller and Milling Engineer, - - -	4.50
St. Nicholas, monthly, and United States Miller and Milling Engineer, - - -	3.50
Scribner, monthly, and United States Miller and Milling Engineer, - - -	3.40
Scientific American, weekly, and United States Miller and Milling Engineer, - - -	4.50
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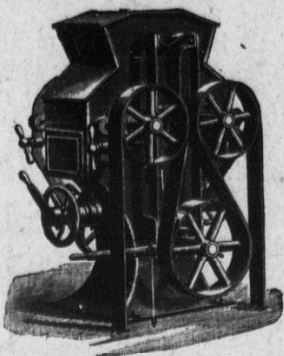
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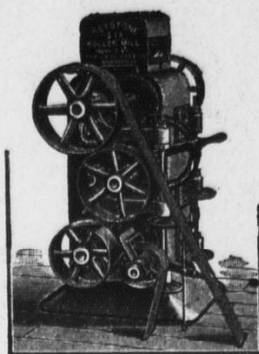
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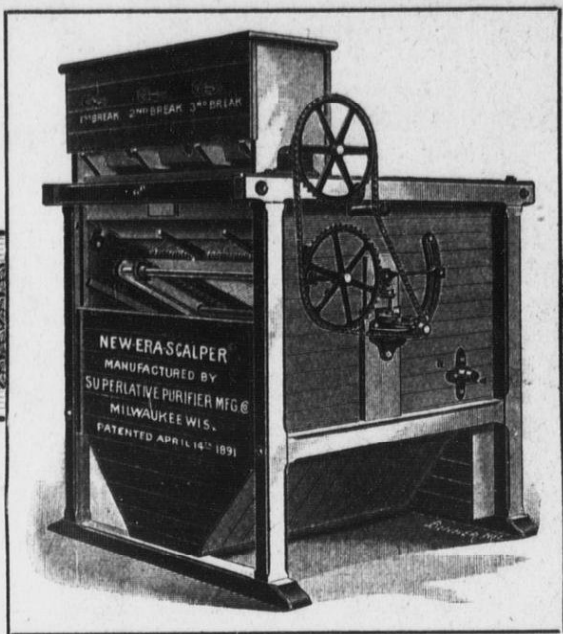
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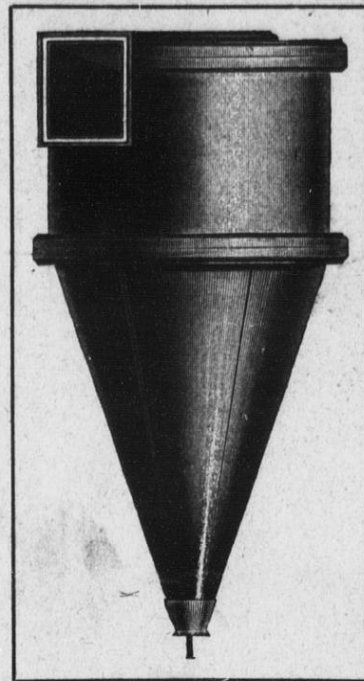
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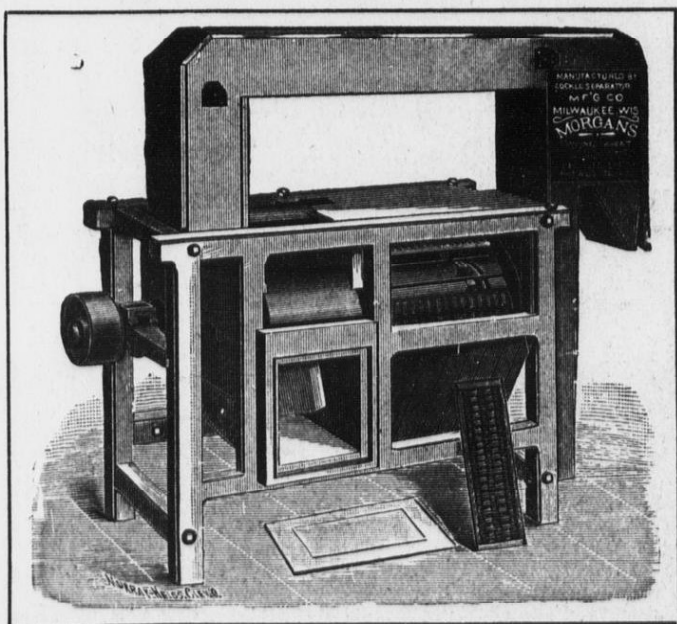
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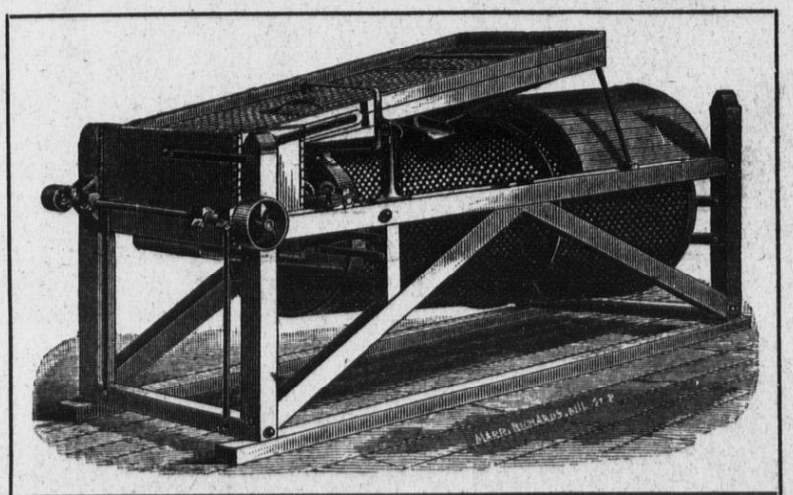
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